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ABSTRACT

The Selected Classroom Project was planned, implemented, evaluated, and disseminated between October 1970 and June 1971. It narrowed the focus of Project COD to helping teachers in specific classroom develop a practical approach to the transition from traditional to "open" classrooms. The 21 participating teachers in grades 4 through 8 were selected by their principals on the basis of teaching experience, competence, and motivation toward change. The help given the teachers by Project COD staff consisted of small and large group workshops in specific techniques, such as nonverbal communication and goal setting, continuation of individual assistance and counseling, and orientation of parents and administrators. Evaluation of the project was accomplished through pre- and post-observation using a specially developed instrument; analysis of journals kept by teachers; and questionnaires completed by teachers, principals, and students. Results of the observation showed a definite change in teacher and student behavior toward those behaviors identified as being typical of a student-centered classroom. Responses to the questionnaires indicated that the majority of those involved--from 75 percent to 90 percent--favored continuation of this approach. Dissemination of the project was accomplished through newsletters, newspaper articles, and conference speeches. (Appendixes contain copies of the evaluation forms, tables of results, a student goal-setting form, and a sample workshop outline.) (RT)

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RESE Title III

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# SELECTED CLASSROOM PROJECT

## HELPING TRADITIONAL TEACHERS TO PLAN AND IMPLEMENT STUDENT-CENTERED CLASSROOMS

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Final Report
June 1971

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## Selected Classroom Project

I. Overview

A. Project COD

Funded as an E.S.E.A. Title III agency in May, 1968, Project COD has served twenty-seven member school systems and the parochial schools in twenty-three southeastern Massachusetts communities. During the first year, the four-member professional staff presented a variety of services as a regional supplementary center, including workshops and inservice programs designed to introduce new concepts in elementary and secondary education. Consulting services in curriculum planning were provided and the use of ERIC materials in selecting new approaches to school and classroom operation were stressed.

The second operational year (with three instead of four professionals) emphasized the development of personnel within the schools to take formal or informal roles as change influencers. Leadership training laboratories for administrators and for teachers were very popular. Courses were offered for teachers which stressed more personalized learning and more emphasis on the role of the student in the classroom.

In the fall of the third year, a number of short courses were offered which provided training for specific new programs or content. As these were implemented, the COD staff turned their efforts toward creating a number of classroom models of personalized learning. Known as the Selected Classroom Project, the program included twenty-one teachers in six public and three parochial schools in six communities. This activity concluded Project COD's function as an agency in June, 1971. Hopefully, the direct and indirect results of all COD's activities will exist well beyond that time.

B. Selected Classroom Project - Rationale

After more than twenty-eight months of diverse educational activities, the COD staff wanted to develop working models of the kind of teaching and learning situations which had a high degree of personalized learning. Several hundred teachers and administrators had been involved in COD's various programs, but there was little evidence that significant improvement in teaching or learning had occurred as a result. Therefore, a program was devised which had as an end product classrooms in which the teacher was a supportive resource for students who were extensively self-directed in both what and how they learned.

Two decisions were dictated by the financial limits of COD's budget. Only twenty teachers (this later became twenty-one) would participate, and these would serve grades four through eight. The latter was an arbitrary limitation based upon the assumption that the primary grades tend to be less structured than the intermediate, and that beyond grade eight, subject emphasis would require specialization in the COD staff which was not available. These decisions should not suggest that a larger number of teachers could not work through this type of approach, assuming that the necessary resources are available in sufficient quantity, or that the style of classroom cannot be extended up or down to any grade level, with few modifications.

The objective of the Selected Classroom Project was not to prove that these types of classrooms are "better" than traditional classes, but rather to develop a practical approach to the transition from traditional to what is often labelled "open" classroom operation. During the first two years, the major request made of the COD staff was, "Show us how to do it!" After many workshops, courses, talks, etc., the participants still wanted to have an experience in which they could learn (with a minimum of personal and professional risk) how to cope with the problems encountered in making a significant change in classroom operation. The staff's task was to develop an approach which would 1) be adaptable to a wide range of teachers' personal and

professional backgrounds, schools, communities, and learners, 2) provide support and rewards for changing (as opposed to maintaining the status quo), 3) create classrooms in which students would learn to be responsible for their own learning.

The COD staff theorized that in order to succeed, several conditions should exist. Teachers would be more likely to do well if they had the enthusiastic support of their superintendents and, particularly, their principals. Those classrooms which evidenced a strong positive teacher-student relationship would have fewer problems as the roles of the teachers and students changed. Having two or more teachers in a building would add an element of support to each teacher. The COD staff should be able to offer concrete, practical solutions to problems as they arise or could be anticipated. Finally, the COD staff should provide support by being in the classroom frequently. These conditions were met in the selection of teachers and implementation of the Selected Classroom Project.

The selection of teachers and the planning, implementation, and evaluation of the project are documented in the following sections. The success of this endeavor is evident in the operation of the twenty-one classrooms. Numerous questions remain unanswered, but some of these are noted in section VI for the benefit of those who might have an interest in carrying such a program to a higher level of study.

II. Procedures used in developing and implementing the Selected Classroom Project

The decision was made in early October, 1970 to narrow the focus of Project COD in order to bring about changes in specific classrooms. The Selected Classroom Project was planned, implemented, evaluated, and disseminated between October 1970 and June 1971, and this time limitation necessitated a very direct, action-oriented approach to bringing about change. In retrospect, this directness, coupled with the positive relationships which COD staff members had developed in the previous two years with some participants, enabled the Selected Classroom Project to develop quickly and thoroughly.

A. Developments and Implementation Stages and Timetable

The following schedule includes those events which were pre-planned as well as those which developed as the Project took shape.

1. Planning

October 5-23
A proposal was written containing a clear set of premises (the rationale) and objectives, requirements for participation, a description of COD's role, and a timeline for the Selected Classroom Project.

2. Preparation - October 26-December 22, 1970

a. October 26-30
"Selling" program to selected superintendents and principals. The Cod staff had arrived at a general assessment of the readiness for change in member systems and in particular schools. Based on this assessment, the superintendents of the eight or ten systems considered most likely to support the Selected Classroom Project were approached on an individual basis. Upon the superintendent's agreement to participate, principals of target schools were invited to have their schools and selected teachers become involved. A high level of commitment by both the

superintendent and principal was considered a key to successful teacher involvement.

b. November 2-20
Selection of teachers-
   i. Teachers were identified by those principals who seemed most willing to participate. After receiving these preliminary recommendations, the COD staff met with potential participants and assessed their general level of practice and attitude in relation to the premises upon which the Selected Classroom Project was to be based.
   ii. COD staff members formally observed each teacher in the classroom to assess teacher and student behaviors and relationships.
   iii. Those twenty teachers judged most likely to achieve growth in terms of the Project were accepted to participate.
   iv. A control group of ten teachers in a non-COD member school (used for pre- and post-evaluation) was also identified at this time.

c. Small group meetings - All twenty participants in groups of four met with the COD staff for one full day to-
   i. Establish an initial relationship between the COD staff and the participants.
   ii. Identify general and specific reactions and problems.
   iii. Plan for further individual planning activities as these seemed appropriate. (See Appendix A, Planning Guide.)

d. Individual planning - The specific needs of each teacher, as identified by the classroom visitations, the goal setting and planning, and the outcomes of the group meeting were examined in depth. Appropriate action steps were planned and scheduled by the staff, and discussed in detail with each teacher in preparation for the first implementation phase.

e. Pre-Implementation Evaluation - In order to collect baseline data concerning the mode of classroom operation and organization, and teacher and student roles, an observational

instrument was designed by the COD staff and Heuristics, Inc. Details concerning the instrument are contained in section IV B.

f. Teacher Attitudinal Evaluation - Because the change in teacher role was expected to produce corresponding attitudinal change, it was decided to monitor this by having each teacher maintain a daily diary of his feelings. These were sent weekly to Heuristics, Inc. where readers analyzed the statements of each teacher and profiled attitudinal changes. (See Section VI B 5.)

3. Implementation-Phase I January 4-February 12, 1971

a. Classrooms. Each teacher introduced the concept of student goal-setting and planning to the class(es) and in the subject area which the teacher had chosen in advance. Students were encouraged to develop short-range goals so that they could have several experiences in the six week period. They were given increased latitude in where and how they could work, both within and, in some cases, outside the classroom. Work with non-textbook materials was encouraged.

b. COD staff. The three staff members visited the teachers during class sessions at least once each week and usually more frequently. Activities included
   i. Diagnosing classroom situations
   ii. Cooperative planning with teachers
   iii. Demonstrating and teaming with teachers in classrooms
   iv. Counseling teachers at their request
   v. Formal and informal evaluation of effectiveness of new approaches, and subsequent individual conferencing with teachers.

4. Total Group Workshop (Winter vacation week) - February 12-14
During eighteen hours of workshop time over three days, the S.C.P. teachers-
a. completed a detailed questionnaire designed to collect data about the teachers' reaction to specific issues, as well as to the overall program. (See Appendix B.)

b. shared their successes and problems with each other. (This was the first time that all twenty teachers had met together.)

c. planned for modification, expansion, and/or continuation of the Project for Phase II.

d. experienced an introduction to non-verbal forms of learning and expression. (Two consultants from Boston University provided a full day of involvement for all S.C.P. teachers.) (See Appendix C)

5. Implementation - Phase II February 26-April 16

a. The kinds of classroom activities in this phase reflected the level of teacher and student growth during the previous phase. The COD staff maintained their counseling roles with individual teachers. Activities included those which were appropriate to the refined goals of each teacher.

b. This period included continued informal formative evaluation which provided data and feedback to the teacher so that classroom practices could be modified. As in Phase I, a combination of classroom observations and individual teacher conferences was used. A 28 item questionnaire was administered to approximately 800 students. Data was analysed by classes according to four categories or central issues. (See Section IV B 3 and Appendix D.)

c. At the request of the teachers, an additional five-hour workshop was held on March 12. Most of the evening was spent in small group discussions of various classroom and student problems and alternatives for resolving these.

d. Teachers met selectively at various times and at their own initiative for cooperative planning, both within each school and among different schools. Most teachers visited several other S.C.P. schools during this period.

6. Dissemination - January-May
Two CONFERences were held in separate locations to provide an opportunity for the twenty teachers to share their experiences with others. Numerous other dissemination activities were carried out including newspaper articles, a radio program, speaking engagements, video tape, a classroom visitation program, and newsletters. (See Section V)

7. Final Evaluation - April-May
Final data was collected on all 30 teachers (the participants and control groups). This data, compared with that collected in the initial evaluation is the basis for a formal assessment of teacher growth and the influence of Project COD staff in causing this growth to occur. (See Section IV.)

8. Documentation - June 1
The entire "Selected Classroom Project" was formally documented. This included a description of each project step, data on each participant, methods used by the COD staff, effectiveness of these methods, evaluation data on teacher growth, student reaction data, effects on schools and systems (principals and superintendents), and recommendations for future use in projects intending to bring about significant growth in teachers.

B. Approach In Planning and Selecting Schools and Teachers (COD staff)

The tasks included in planning and selecting teachers included "selling the project" to schools, communicating to the potential participants the expectations and requirements of the project, screening the applicants and selecting those who appeared to be most likely to succeed in changing their classrooms, and finding the most effective approach to bringing about this change.

From its experience, the staff identified those conditions which, when combined, represented the best potential for bringing about change. The most significant of these, expressed in terms of

teachers, were:

1. The direction and goals of a particular change were clearly identified and understood,
2. Each teacher volunteered his participation on the basis of that understanding,
3. There was clearly communicated support from the supervisors and administrators involved with the particular teacher's situation,
4. Opportunity for personal consultation with an objective advisor was readily available and was based on a trusting relationship,
5. At least two teachers who were attempting to bring about a similar change were located in a school and had a close working relationship,
6. Regular evalution of progress toward the planned goals had to take place in a non-threatening and useful way.

The approach in introducing the Selected Classroom Project had to assure that these conditions were present. Therefore, the COD staff supplied each interested school system with a complete set of premises and expected teacher and student behaviors. (See p. 3, 4, 5, Appendix E) COD further insisted that each system's superintendent, building principal, and all teachers expressing interest in participating had read the premises and objectives prior to an initial meeting with COD.

The first meeting was with the principal and included a discussion of the premises, the nature of the Project, the role of the COD staff, and expectations for teachers and students and the building principal. Provided there was interest, a second meeting was held with teachers who had been identified by the principal as being interested. The same issues were discussed. If, as a result of this second meeting, two or more teachers were strongly motivated to participate, they were visited in their classrooms by at least two members of the COD staff in order to assess the quality of relationship existing between students and teachers. The COD staff operated on the premise that a constructive relationship between student and teacher is essential to any learning in any type of classroom. This entire process resulted in the identi-

fication of fifty teachers to be screened from which twenty teachers were finally chosen.*

C. Planning With Selected Teachers

The COD staff decided that bringing teachers together in small groups for a full day would be a better use of time than trying to plan with all twenty at once. There seemed to be no essential reason for all teachers to come together in the initial stages. Groups of four were selected by subject areas and/or grade levels. The staff also developed a basic guide for teachers to use in planning. (See Appendix A.)

A typical planning meeting began at 9:00 A.M. with a brief review of the premises and objectives around which the initial proposal was written. Specific issues (student initiation, goal-setting, activity, diversity, responsibility, teacher-role, etc.) were raised by the COD staff to allow teachers to clarify their perceptions, opinions, and values. Following this discussion, time was provided for each teacher to read the planning guide which contained a series of questions for consideration.

The question in the guide, "What is my view of an achievement goal and how can I help students to set their own?" received most attention during the planning sessions. In fact, the issue of goal-setting seemed to overshadow the total concept of classroom development at this initial point. The majority of teachers in the planning sessions had serious doubts about the ability of students to set a goal. Perhaps the most significant help given by the COD staff in planning was an unshakeable faith in the ability of nearly all students to set a goal.

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*Sr. Theresa Fortin, science teacher for grades five through eight at St. Anne School, New Bedford had, with Project COD's cooperation, developed this type of classroom a year before. Sr. Theresa was used initially in a consulting role with the S.C.P. teachers, and her room was a model for most. As the Selected Classroom Project developed, Sr. became the "twenty-first" teacher.

The afternoon session of each planning day was spent on questions such as:

1. How do you stimulate students to think about goals?
2. What do you do with unrealistic goals?
3. What kinds of limitations should be placed on goal-setting?
4. What do you do about a student who can't seem to think of anything to do?
5. What about the content in my subject area?

The COD staff and teachers identified alternative means of dealing with these and other questions. Brainstorming techniques and special small group activities (role playing) etc. were identified as means of stimulating students to consider what a goal was and what their personal interests might include. Counseling techniques were examined by which a student could be assisted to select a specific goal from a broad area of interest, or to consider the availability of resources. Teachers were encouraged to examine the possibilities offered by their entire school and community when helping students. In short, the whole focus of planning became the identification of options readily available to teachers.

The COD staff continually reminded the teachers that the objective of the Selected Classroom Project was not to produce twenty identical classrooms. Nor were teachers to feel pressured to follow a COD or group format for implementing in their classrooms. Each teacher was to use those means, format, and timeline that he or she felt was best for the students involved. The basic set of premises was the only consistent working agreement between the COD staff and the teachers. A good example of the flexibility and variations could be seen in the way each teacher handled the question of content. Two social studies teachers chose to set no content limitations on student goals, while two others used chapter headings in previously used texts as conceptual "boundaries" for goal-setting. Two English teachers formed teams with social studies teachers and conducted no formal instruction in

language arts, while others developed a program of skills to be included in student goal-setting. The COD staff feels that the premissive, low pressure approach used by the COD staff is essential to reducing tension and uneasiness, and honestly helping people to grow from where they are. Any other approach would contradict the very premises upon which the new classrooms are based.

After completing this day of planning each teacher was asked to go back and look at his plan in light of the realities of his classroom situation. A few days after the planning session each teacher was visited in the classroom by a member of the COD staff who observed the classroom situation and then reviewed and discussed the teacher's plans for implementation. From this point on, most of the contact between the COD staff and the teachers was in the classroom setting.

D. COD Role

The members of the COD staff filled a variety of roles with the individual teachers. Each COD staff member assumed primary responsibility for specific teachers, and shared a secondary role with each other teacher. Ideally this would create close communication between each teacher and the COD staff. One staff member had primary responsibility for formal observational evaluation in all classrooms.

The following brief descriptions summarize the various COD roles which are listed from the most to the less frequently fulfilled.

1. The "idea man" - Teachers (either in the classroom setting, at lunch or planning time, or after school) simply presented problem situations that confronted them and looked to the COD staff for alternative solutions.

2. Cross fertilization - Ideas or successful practices were communicated by the COD staff from one S.C.P. teacher to others - (related to 1.)

3. Personal counseling - Teachers in periods of personal stress, doubt, and confusion needed someone to listen to their problems.

4. "Just be there!"- Many times the simple physical presence in the classroom of a COD staff member was reassuring to a teacher.

5. Talking with students - At times teachers identified specific students who did not seem to be responding. In other cases a COD staffer simply helped any student who seemed to want it.

6. Evaluation - Some teachers requested that a COD staff member examine the quality of students' goals and plans.

7. Talking with administrators - Principals and superintendents required reassurance and needed specific questions answered. (See Section III, D.)

III. Outcomes and Effects

A. Overview

The intent of the Selected Classroom Project was to help teachers to transform their classrooms in the direction of the stated premises. Therefore, the most fundamental question might be, "What actually happened in the classrooms?" The simplest answer is that all classrooms did change in the direction of the stated premises. However, this leaves much unsaid. For instance, how did the changes come about? What changes were most difficult? What were the reactions of teachers, students, parents, and administrators? Answering these questions requires describing a variety of processes, and the results and problems encountered, and examining the available evaluation information.

B. Reactions of Teachers and Students after Implementation

The first two weeks of January were surprising to members of the COD staff. Each teacher initiated student goal setting in the first week of January. For seventeen of the twenty teachers, student acceptance and response was very positive. Most students were well into an independent project within a few days. The exceptions were so few that most teachers were highly enthusiastic. The COD staff witnessed a very obvious transformation of student and teacher activities in classrooms. Increased student conversation and movement were the most striking differences to any observer .

Most teachers were immediately quite effective in helping students on one-to-one and small group bases. Statements were made such as "I have never been so relaxed as a teacher", "I am very tired at the end of a day but it is a good tired not a result of nervous tension", "These kids can really do it", "I am getting to know kids who were just faces", and "This way of teaching is really fun".

This immediate high level response on the part of students and teachers can be attributed to many factors, not the least important of which is the rise of morale that comes with many new innovations simply because they are new. However, it is also

evident that there are conditions that operate to the detriment of teacher and student morale in many standard classroom settings, and these were changed by the Selected Classroom Project approach. (1) The continuous attempt by one person (the teacher) to impose a singular line of thought on twenty, thirty, or forty students at one time, (2) the natural physical restlessness of children, (3) the standardized routine of textbook reading, answering questions, and taking tests, (4) the low level of interaction between the teacher and many students, and (5) the unimaginative physical setting in classrooms. Each of these conditions was changed within the first week. Students were setting goals close to their personal interests, they were free to move and converse, some were meeting their goals by reading and writing but many were drawing, cutting, building, sewing, talking, etc., students and teachers were talking about personal interests and needs, and the furniture in the classrooms was constantly being rearranged or changed as new projects were started.

C. Modifying Classroom Procedures

The establishment of "ground rules" for the classroom operation was important. Since teachers were encouraging students to accept more responsibility for their own learning and affairs, nearly all classroom rules were subject to reconsideration. Most teachers quickly established that going to the lavatories, talking to other students, sharpening a pencil, getting paper or a book, etc. were not activities which require a teacher's attention. These were simply normal things that had to happen in a classroom. In the majority of cases, going to the library or another classroom required only that the student inform the teacher as to where he was going. About half of the classes began to use hall space or adjourning or vacant rooms as part of the accepted student operating space. Use of these areas did not require special permission. However, in some cases, the proximity of a non-SCP teacher (who was sometimes unsympathetic to SCP goals) limited the use of the space. Six SCP teachers were unable to have children leave their classrooms to use other spaces.

D. Evaluation and Reporting of Student Achievement

In two schools (six SCP teachers) the written goal setting and planning form was further developed to include an evaluation section for both students and the teacher. This form replaced letter grades and was sent directly home to the parents for their comments. The majority of parents appreciated receiving this increased information from the school. Parents also were invited to help students plan their future projects. These goal setting, planning, and evaluation forms were eventually placed in folders which were accessable to both teacher and students, thereby replacing the standard rank book.

E. Problems, Solutions, and Some Related Comments

1. Most of the problems encountered by teachers and students during the first two weeks centered on the mechanics of setting goals, writing plans, getting resources with which to work, or establishing ground rules for the use of classroom and school space. Those teachers who had devised a procedure or form to be used in goal setting and planning experienced less difficulty in the early stages. Eight teachers simply began with an oral description about setting goals. In nearly all cases these teachers experienced problems with vague goals, superficial planning, and a lack of follow through. Most of these teachers eventually adopted some kind of written form. (See Appendix F.)

2. The third week of January proved to be the first "down" point in morale for at least ten teachers. Most of these had less than five years teaching experience. In many cases they had not defined a written procedure for goal setting, planning, and evaluation prior to starting the program. Help was provided by the COD staff (including some personal counselling about the teachers' doubts) by bringing to them the successful practices of other SCP teachers. Goal-setting and planning sheets were exchanged and modified frequently. The use of flow-charting to give direction to students' planning was adopted by most teachers.

It is important to note that the problems experienced by the less experienced teachers in the early weeks were mainly those of mechanics. In contrast, most of those with over five years in teaching seemed to be very secure in making the transition, and this was reflected in their students' actions. Two entries for the third week of January from records kept by a COD staff member help to illustrate the differences in classrooms:

Teacher with less than five years experience:
"Visited with X's class for the entire period. There are a large number of kids without any real focus. I strongly suggested that X tighten up on the planning process. Do this by sitting with individuals and writing out a rather detailed plan. Possibly even designate an area of the room for planning in order not to interfere with kids already working on projects."

Teacher with more than five years experience:
"Y's class is beautiful. I left a note to this effect on the principal's desk. Y has kids working on all kinds of projects; building, writing, drawing, etc. The kids handle themselves very well, I saw a group of four girls do a play which most of the class decided to watch. The kids moved from 'doing their thing' to the play and back with real individual purpose."

3. During the first two weeks change itself sustained the momentum of nearly all classrooms. However, in the third week some students seemed to run out of ideas and needed the steady support of a secure teacher to encourage them to search for new and more sophisticated goals. Those teachers struggling with basic mechanics were not able to respond quickly, and problems became somewhat frightening to them. With one exception, all of these teachers were able to regain their confidence in a few days by building in some simple structures for planning, etc.

4. Several of the more experienced teachers, while maintaining obviously high quality "student-centered" classrooms as observed by the COD staff, were undergoing an internal stress.

Another diary entry:

> "Z called this morning and said that there were some questions that needed to be discussed. Z was obviously going through a period of intense personal questioning about the implications of her 'classroom'. We talked about kids forgetting how to study and about the need to learn certain things. Z had discussed these things with a friend well into the night before. It's very easy to assume people are rolling along when they don't show obvious anxiety. My only help was to listen and offer personal observations. Z has to work these issues through within herself. Z is a good example of a 'top notch' teacher trying her damndest to do the right thing by kids."

This struggle with the implications of the premises upon which the Selected Classroom Project appraoch was based never ended for many teachers. Yet, not one of these teachers chose to return to a traditional approach during the entire term of the project. This fact strongly supports the thesis that the student-centered classroom, once experienced successfully, causes strong commitments on the part of teachers and students. In many instances, teachers have heard educators talk about "student-centered" classrooms but this had not been sufficient to create sustained motivation. From the beginning, the COD staff and the teachers agreed that talk was not enough. There had to be an experience (in depth and with support) in order for the teachers to make a commitment to the approach.

Most teachers and administrators participating in the Selected Classroom Project did not view the changes as ends in themselves. Rather, they saw these as a beginning, an opening to

a variety of approaches to teaching and learning. This attitude is in contrast to the somewhat limited outlook generated by many projects which attempt to bring about change through the curriculum. In these situations, the teachers' behavior is modified to accommodate a new program, and when this has been achieved the teachers go no further in making changes.

5. The various roles of the COD staff have been described in a prior section. In practice, the staff worked interchangeably with some S.C.P. teachers and exclusively with others. The goal of having close professional communication between at least one COD staff member and each of the 20 teachers was not fully realized. In several situations the teachers preferred to discuss their problem with each other, rather than using the COD staff. This fulfilled the objective of having two or more S.C.P. teachers in the same school, and was considered generally a positive development. However, in one school, it resulted in limited receptivity to the ideas of the COD staff, and poor communication. Perhaps one of the most significant insights gained from the COD role with S.C.P. teachers is that having someone who understands the objectives and is supportive, and who is available when needed, is essential to support change. Ideally, a principal or assistant principal would be able to fill this role. However, not all administrators want to or are able to fill this role, so it may be possible to have another teacher, a supervisor, or an outside consultant take this supportive position.

6. Nearly all of the teachers began the Selected Classroom Project approach in one subject area with one or two classes. The intention was that teachers would go through the first seven week cycle on this limited basis and then decide whether to expand, continue as they started, or drop the approach. After the first three or four weeks all but six of the S.C.P. teachers had expanded to other subjects and/or more students. Statements such as "I can't be two kinds of teacher" were common. The impetus

for this rapid expansion seemed to be the relaxed, enjoyable, and personal atmosphere in all SCP classrooms. It seemed to be legitimate for teachers to enjoy new experiences along with students. These new experiences included simply talking with students about new interests. Also, it was stimulating to most teachers to see many different activities occuring simultaneously. The contrast between this style of learning and most standard classrooms was striking. Consequently, by the end of the first phase (in mid-February), fourteen teachers were spending nearly the entire day in a "student-centered" setting. Even those teachers who did not expand the time spent in the Selected Classroom Project approach agreed that the new relationships which they developed with students had a very real effect on how they worked in other subject areas or with other students.

7. The COD staff and S.C.P. teachers agreed that the most effective way to gauge the progress of a particular classroom was to speak regularly with students about their view of the changes taking place. Perhaps the greatest insight gained by both the COD staff and the teachers from these student discussions was the depth of their interest and understanding about the kind of classroom they were in and how they learned. While most students valued highly their new found autonomy, some had serious reservations.

   Eighth graders particularly were concerned about how much content they might be missing. This was specially true of those facing competitive high school entrance exams. The most negative student reactions to changes in the S.C.P. classrooms came from some "high achievers". These centered on the lack of a secure path to follow in learning specific content which would insure academic recognition. The read-study-test routine required little personal reflection about interests and values on the part of very able students. Setting a learning goal and writing a plan carried no built-in guarantee that the results would receive approval from teachers and parents.

This attitude contrasted sharply with that of some previously low achievers who were no longer blocked by their limited verbal and numerical skills. They could do things that had personal importance and because these were legitimate; they could gain recognition from their peers, parents, and teachers. The intensity of positive feeling generated in many students was most evident in their efforts to influence other teachrs to adopt an S.C.P. format. While these efforts were met with negative reactions from some teachers, it served to increase the interest of others in the S.C.P. classrooms.

8. Parental reactions were very visible in three schools involving nine S.C.P. teachers, and this probably affected the attitudes of some students. Generally, parents who expressed themselves voluntarily were on the extremes of positive and negative. In one middle class suburban community, a small but vocal group of parents attacked the S.C.P. classrooms as contributing to permissiveness, poor learning habits, and a general deterioration of the school system. However, when both principal and teachers explained their approach and invited visits from these parents, most of the objections subsided.

The negative reactions of an equally vocal group of parents of a similar socio-economic background in a city parochial school were not so readily satisfied. In this situation, the school director and the principal differed on the value of the S.C.P. approach and this did not encourage a resoltuion of the parental protests. The lack of internal agreement, coupled with relatively little experience on the part of teachers and the principal, contributed to a continuous negative reaction from a significant number of parents. Both instances of negative parental reaction involved seventh and eighth grade students. This also was a situation in which the teachers had rapidly expanded the S.C.P. approach to cover most of the school day. Yet, there were other schools with similar populations and

grade levels where nearly all parental reaction was supprotive. It appears therefore that where administrators and teachers are in philosophical agreement, and are regarded by the community as experienced, negative reactions can be overcome.

9. The reactions of other teachers in the same school were as important as those of parents to the success of the classrooms. In both schools where negative parental reactions was a problem, there were staff members who were equally negative. In one school, some of these teachers actually contributed to the parents' concerns by their comments to parents or to students. Overall, most other teachers were cool, but a little curious, toward the S.C.P. classrooms. Some openly applauded the change in student attitudes while others looked for problems. In one S.C.P. school the majority of the faculty requested workshops with the S.C.P. teachers and COD staff in order that they might move in the same direction. In three schools a non-S.C.P. teacher teamed up with one or more S.C.P. teachers and began to operate a similar classroom.

10. As teachers became more adept at handling the basic mechanics of classroom operation, they began to raise questions about the quality of the learning activities. Most were concerned with the nature of student goals, the planning process, and cooperative evaluation. The COD staff explored each of these areas in depth (with randomly selected students) by examining student folders and conducting interviews. Instruments were developed containing predetermined criteria and questoins. (See Appendix G.)

    This study by the COD staff determined that the initial act of goal setting needed much more attention from the teacher. The kinds of goals selected by most student had several weaknesses; (1) most goals required simply collecting information, (2) there was little relationship or development from one goal to the next, and (3) there was little increase

in challenge from one goal to the next. Both teachers and COD staff agreed that the one-to-one counselling of students by the teacher needed to be strengthened. This did not necessarily require more time but represented a more sophisticated approach to establishing goals.

Since most students were only collecting knowledge, they needed to be introduced to the higher levels of cognitive process: application, analysis, synthesis, and evaluation. The teacher had to illustrate how an initial interest to know more about something could be extended to more active and challenging levels. (The COD staff also concluded that the teachers themselves needed to become more familiar with cognitive processes.) The emphasis on the cognitive hierarchy also caused students to improve their subsequent planning.

Evaluation was looked upon favorably by the students who were interviewed. They felt that sitting down with the teacher and writing out a cooperative evaluation was very beneficial and helped the students to understand the teacher and his approach to judging students' work.

11. Because the change process involved a substantial role alteration, the S.C.P. teachers were asked to cooperate in the evaluation of their attitudinal reaction by maintaining a "diary". This was read weekly by anonymous readers who analyzed the teachers' statements according to predetermined criteria. The analysis of these diaries is detailed in section IV, part 5. See Appendix H for the complete report on PROSE Evaluation.

    Nineteen of the original twenty teachers maintained diaries for at least part of the period. Ten teachers provided a full response over the fifteen weeks. As indicated in the full report, the technique was very effective, and provided documented data which would have been difficult, if not impossible to obtain otherwise.

The data indicates beyond any doubt that a majority of the teachers did experience many of the classic symptoms associated with any significant change. The role of the COD personnel was extremely well received, especially as this helped to reduce the teachers' anxieties and frustrations.

The reaction of the S.C.P. teachers to the overall program, the workshops, role changes of the teachers and students, the alterations in instruction and content, and the reactions of others to the program are dealt with in greater detail in section IV, part 5.

12. In February the S.C.P. teachers gathered for a three-day workshop. This was the first time all S.C.P. teachers came together at one time. All but one teacher left that workshop committed to continuing or expanding the "student centered" approach. One teacher chose to limit student goal-setting to already established choices and to reduce the informality of the classroom.

During the second phase of the Selected Classroom Project (from late February through April) each of the twenty teachers continued with the original or an improved format. The COD staff, while continuing to consult with teachers on a regular basis, was able to observe and analyze the similarities and differences in the classrooms. The question arises as to which classrooms best represent the original premises? Since all classrooms show most of the characteristics to some degree, the answer is a subjective one. However, based on the opinion of the COD staff, student attitude scales, and the views of the teachers, there are eight teachers who meet all original premises to a high degree. (See Chart 2, Teachers 1, 2, 5, 6, 7, 8, 16, 21.)

The following list of characteristics represents a general composite of these eight teachers. Many of these characteristics were exhibited to some degree by all SCP

teachers. Characteristics which are present in the more successful Selected Classroom Project teachers include:

1. Has five or more years of teaching experience
2. Was quite directive in previous teaching and was considered successful by peers and supervisors
3. Tend to be firm and had clearly understood rules
4. Was considered demanding by students
5. Considered selves as "generalists" rather than subject matter "specialists"
6. Was liked and respected by other staff members and administrators
7. Showed obvious concern when listening to others
8. Was very open in relationships with others
9. Conversed easily with students
10. Worked cooperatively with the staff members when appropriate.
11. Responded <u>in action</u> to the needs of others
12. Appeared to be confident of themselves
13. Not easily rattled in a demanding situation
14. Rarely reacted in extremes
15. Behaved consistently in varying situations
16. Was slow to change, but became firmly committed to successes.

F. <u>Mechanics of Implementation</u>

Chart 1 shows the frequency of use of implementational and organizational techniques employed by SCP teachers.

CHART 1: Mechanics of Implementation

| MECHANICS | Teachers | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 1. Dropped textbook(s) as principal guide | X | X | X | | | | X | X | X | X | | | | | | X | | | | X | X |
| 2. Modified use of text | X | X | | X | X | X | | | | | X | X | X | X | X | X | X | X | X | | X |
| 3. Followed a curriculum outline | X | X | | | X | X | | | | | X | X | X | X | X | | X | X | X | X | X |
| 4. Combined two or more disciplines | | | | | | | X | X | X | X | | | | | | X | | | | | X |
| 5. Used written goal & planning sheets | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X |
| 6. Used written evaluation sheets | X | X | | | X | X | X | X | X | X | | | X | X | X | X | X | X | X | X | X |
| 7. Reported in writing only to parents | | | | | | X | X | X | X | X | X | | | | | | | | | | |
| 8. Used grades and writing | X | X | | | | | | | | | | | | | | X | | | | X | X |
| 9. Used grades only | | | X | X | | | | | | | X | X | X | X | X | | X | X | X | | |
| 10. Had teacher aide(s) | X | X | | | | | | | | | X | X | X | X | X | | | | | X | X |
| 11. Principal participated in classes | | | | | | | | | | | | | | | | X | X | X | X | | |
| 12. Sought other adults as resources | X | X | X | | X | X | X | X | X | X | X | | | | | X | X | X | X | X | X |
| 13. Joined two or more rooms | X | X | | | X | X | X | X | X | X | | | X | X | | | X | X | X | | |
| 14. Joined by a non-SCP teacher | X | X | | | X | X | | | | | | | | | | X | | | | | |
| 15. Had students work out of school building | X | X | | | | | X | X | X | X | | | | | | | | | | | |
| 16. Regularly used areas other than classroom | X | X | | X | | | X | X | X | X | | | X | X | X | X | X | X | X | X | X |
| 17. Substantially altered time schedule for day | X | X | | | | | X | X | X | X | | | X | X | | X | X | X | X | X | X |
| 18. Moved most of all students desks out of room | | | | | | | | | | | | | | X | | X | X | X | X | X | X |
| 19. Divided room(s) into special purpose areas | X | X | | | | | X | X | X | X | | | X | X | | X | X | X | X | X | X |
| 20. Teacher visited other SCP rooms/schools | | | | | X | X | | | | | | | X | X | X | | X | X | X | X | X |
| 21. Had visitors from other schools | X | X | | | X | X | X | X | X | X | | | X | X | X | X | X | X | X | X | X |
| 22. Made requests for help from COD staff | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 23. Enthusiastically endorsed SCP approach | X | X | X | | X | X | X | X | X | X | X | | | | | X | X | X | X | X | X |

## IV. Evaluation

### A. Overview

The basic premise of the Selected Classroom Project was that "given the direct support of the Project COD staff and a cooperative school setting, a teacher in grades 4-8 can transform a standard 'teacher-centered' classroom into one which is 'open', or student-centered, in a period of four months or less." There is no attempt in the Selected Classroom Project to prove that students learn more effectively in a student-centered classroom than in a more conventional one. Therefore, all evaluation data was intended to document that an actual transformation did occur as a result of the effort of the participating teachers and the COD staff. Data also was collected on the attitude of those involved in this transformation and on the advantages and problems related to the process.

The most significant and representative results from each evaluation source (teachers, COD staff, students, and administrators) are included with samples of the instrument used in each case. Some analysis and interpretation of the basic data is included.

### B. Evaluation of S.C.P. Classrooms in Transition

#### 1. Formal Observation of Twenty-one Selected Teachers and Their Students

a) In cooperation with Heuristics, Inc. the COD staff attempted to design an observation/interview instrument which could be used in evaluating the student and teacher behaviors. Evidence of specific behavior was to be observed and recorded according to frequency of occurance. Where this was difficult to observe, the instrument called for interviews with teachers and randomly selected students.

The instrument was modified as a result of several field tests, and was finalized in the form shown in Appendix I. The use of the instrument in traditional classes, as

most of the Selected Classroom Project rooms operated before the teachers implemented the program, provided few problems. There were relatively few activities to record. However, once the classes implemented the Selected Classroom Project program, the instrument became useless as a record of quantitative data because "classes", as such, were not observable. Students frequently moved out of the observer's view and teachers were sometimes completely absent. Even the interview approach did not yield satisfactory data, as the class activities were extremely fluid from day to day, and these were often so varied at a given time, that they could not be generalized by sampling.

b) The Data

Because of these problems, the evaluation became more qualitative and judgemental than originally expected. The observer (a COD staff member) documented anecdotally numerous teacher and student behaviors. These appear in matrix format as Charts 2 and 4 for pre-tests and Charts 3 and 5 as post-tests. The degree to which these were acquired is generalized by "high", "moderate", "low", and "none".

c) Interpretation

The overall conclusions are that the twenty S.C.P. classrooms did change from being relatively passive, teacher centered, sigle activity, student listening, and textbook oriented, to dynamic, student active, non-textbook classrooms in which the teacher served in a diagnostic, counselling, and resource role, giving minimum direction to students and encouraging little or no total class activity.

The original S.C.P. proposal had a list of twenty-six teacher behaviors and thirty student behaviors which were considered to be desirable in the S.C.P. classrooms. Eighteen of each were selected and evaluated on a pre- and post-S.C.P. basis.

CHART 2. Pre-implementation Data - Teacher Behaviors

| Selected Characteristics of TEACHER BEHAVIOR | Degree to Which Behaviors Were Attained* | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 1. Documents specific information interests, problems, progress of each student | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | This teacher operated this type of classroom prior to Dec. | C | C | C | C | C |
| 2. Assists each student in setting his own goals | B | B | | | | | | | | | | | | | | | | | | | |
| 3. Consults regularly with each student | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | C |
| 4. Encourages students to share and cooperate | B | B | B | C | B | B | C | C | C | C | C | C | B | B | B | | B | B | B | C | B |
| 5. Permits conversation | A | A | B | B | B | B | C | C | C | C | B | C | B | B | B | | B | B | B | C | B |
| 6. Encourages free movement | A | A | B | B | B | C | C | C | C | C | C | C | B | B | B | | C | C | C | C | C |
| 7. Permits each student to use own learning style | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | C |
| 8. Judges when simultaneous interruption of whole class is necessary | B | B | | | | | | | | | | | | | | | | | | | |
| 9. Works with small groups and individually whenever possible | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | C |
| 10. Encourages and assists students to expand an activity | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | C |
| 11. Assists students in making use of all resources | B | B | | | | | | | | | | | | | | | | | | | |
| 12. Works in a team relationship with other teachers | C | C | | | | | | | | | | | C | C | | | | | | | |
| 13. Is physically accessible | A | A | B | B | B | B | B | B | B | B | B | B | B | B | B | | B | B | B | B | B |
| 14. Listens carefully to students seeking assistance | A | A | A | B | B | B | C | C | C | B | B | C | B | B | B | | B | B | B | C | B |
| 15. Gives verbal and non-verbal encouragement | B | B | B | B | B | B | B | B | B | B | B | B | B | B | B | | B | B | B | B | B |
| 16. Helps each student to evaluate his achievement | A | A | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | C |
| 17. Allows students to continue activity for extended time | B | B | C | B | C | C | C | C | C | C | C | C | B | B | B | | C | C | C | C | C |
| 18. Provides materials and situations which elicit non-written responses | B | B | B | B | C | C | | | | | | | C | C | C | | | | | | C |

*CODE: A - high degree B - moderate degree C - low degree Blank - not attained

CHART 3. Post-implementation Data - Teacher Behaviors

| Selected Characteristics of TEACHER BEHAVIOR | Degree to Which Behaviors Were attended* | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 1. Documents specific information interests, problems, progress of each student | A | A | B | C | A | A | A | A | A | A | B | B | B | B | B | B | B | B | B | B | B |
| 2. Assists each student in setting his own goals | A | A | A | B | A | A | A | A | B | B | B | C | A | A | A | A | A | A | A | B | A |
| 3. Consults regularly with each student | B | B | B | B | A | A | A | A | B | B | B | B | A | A | A | A | B | B | A | B | A |
| 4. Encourages students to share and cooperate | B | B | B | B | A | A | B | B | B | B | B | B | B | B | B | A | A | A | A | A | A |
| 5. Permits conversation | A | A | A | B | A | A | A | A | A | A | A | B | B | B | A | A | A | A | A | A | A |
| 6. Encourages free movement | A | A | A | B | B | B | B | B | A | A | A | C | B | B | A | A | A | A | A | A | A |
| 7. Permits each student to use own learning style | A | A | A | B | B | B | B | B | A | A | A | C | B | B | A | A | A | A | B | A | A |
| 8. Judges when simultaneous interruption of whole class is necessary | A | A | A | C | B | B | A | A | A | A | | C | B | B | B | A | B | B | B | B | A |
| 9. Works with small groups and individuals whenever possible | A | A | A | B | A | A | A | A | A | A | A | B | B | B | A | A | A | B | A | A | A |
| 10. Encourages and assists students to expand an activity | A | A | A | A | A | A | A | A | A | A | A | B | B | B | A | A | B | B | B | B | A |
| 11. Assists students in making use of all resources | A | A | A | A | A | A | A | A | A | A | B | C | A | A | A | A | A | A | A | B | A |
| 12. Works in a team relationship with other teachers | A | A | | | C | C | A | A | A | A | | | B | B | | C | C | C | C | C | C |
| 13. Is physically accessible | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| 14. Listens carefully to students seeking assistance | A | A | A | B | A | A | A | A | A | A | B | B | A | B | B | A | A | A | A | B | A |
| 15. Gives verbal and non-verbal encouragement | A | A | A | B | A | A | A | B | B | B | B | B | B | B | B | A | B | B | A | B | A |
| 16. Helps each student to evaluate his achievement | A | A | B | B | B | A | A | A | A | A | C | B | B | B | B | A | A | A | A | B | A |
| 17. Allows students to continue activity for extended time | A | A | A | A | A | A | A | A | A | A | A | C | B | B | A | A | A | A | A | A | A |
| 18. Provides materials and situations which elicit non-written responses | A | A | A | A | A | A | A | A | A | A | A | C | B | B | A | A | A | A | B | B | A |

*CODE: A - high degree B - moderate degree C - low degree Blank - not attained

CHART 4. Pre-implementation - Student Behaviors

| Selected Characteristics of STUDENT BEHAVIOR | Degree to Which Behaviors Were Attained* | | | | | | | | | | | | | | | This teacher operated this type classroom prior to Dec. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 1. Selects own learning goals | B | B | | | | | | | | | | | | | | | | | | | |
| 2. Selects own way of learning | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | C |
| 3. Selects with whom he learns | A | A | B | B | C | C | C | C | C | C | C | C | B | B | B | | C | C | C | C | C |
| 4. Selects where he learns | A | A | C | B | C | C | C | C | C | C | C | C | B | B | B | | C | C | C | C | C |
| 5. Learns with minimum of teacher direction | B | B | | C | C | C | C | C | C | C | | | C | C | C | | C | C | C | C | C |
| 6. Uses materials which encourage creative expression | B | B | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | B |
| 7. Readily seeks teacher guidance | A | A | A | B | A | A | A | A | B | B | B | B | A | B | A | | A | A | A | B | A |
| 8. Consults with other students | A | A | C | C | C | C | C | C | C | C | C | C | B | B | B | | C | C | C | C | C |
| 9. Responds to teachers and students with mutual respect | B | B | C | C | B | B | B | B | B | B | C | C | B | B | B | | B | B | B | B | A |
| 10. Alters physical setting of room | B | B | C | C | C | C | | | | | C | | C | C | C | | C | C | C | C | B |
| 11. Proceeds without teacher direction | B | B | | | C | C | C | C | C | C | | | C | C | C | | C | C | C | C | C |
| 12. Engages in wide variety of activities | A | A | C | C | C | C | C | C | C | C | C | | C | C | C | | C | C | C | C | C |
| 13. Converses, smiles, relaxes in natural manner | A | A | B | B | B | B | B | B | B | B | B | C | B | B | B | | B | B | B | B | B |
| 14. Continues activity for extended time | B | B | C | B | C | C | C | C | C | C | C | C | B | B | B | | C | C | C | C | C |
| 15. Voluntarily extends activity beyond school day | B | B | | | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | B |
| 16. Participates in evaluation with teacher | A | A | C | C | C | C | C | C | C | C | C | C | C | C | C | | C | C | C | C | C |
| 17. Prepares effective plans | B | B | | | | | | | | | | | | | | | | | | | |
| 18. Uses things which have personal meaning | B | B | C | C | C | C | C | C | C | C | C | | C | C | B | | C | C | C | C | C |

*CODE: A - high degree B - moderate degree C - low degree Blank - not attained

CHART 5. Post-implementation Data - Student Behavior

| Selected Characteristics of STUDENT BEHAVIOR | Degree to Which Behaviors were Attained* | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 1. Selects own learning goals | A | A | A | B | A | A | A | A | A | A | A | C | B | B | A | A | A | A | A | A | A |
| 2. Selects own way of learning | A | A | A | B | A | A | A | A | A | A | A | C | B | B | B | A | A | A | A | A | A |
| 3. Selects with whom he learns | A | A | A | A | A | A | A | A | A | A | A | B | B | B | A | A | A | A | A | A | A |
| 4. Selects where he learns | A | A | B | B | B | B | A | A | A | A | C | C | A | A | A | B | A | A | A | A | A |
| 5. Learns with minimum of teacher direction | A | A | C | B | B | A | A | A | A | A | C | C | B | B | B | A | A | A | A | A | A |
| 6. Uses materials which encourage creative expression | A | A | B | B | B | B | A | A | A | A | B | C | B | B | B | B | B | B | B | B | A |
| 7. Readily seeks teacher guidance | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| 8. Consults with other students | A | A | A | A | A | A | A | A | A | A | A | B | A | A | A | A | A | A | A | A | A |
| 9. Responds to teachers and students with mutual respect | A | A | B | B | A | A | A | A | A | A | C | C | A | A | A | A | A | A | A | A | A |
| 10. Alters physical setting of room | B | B | B | C | B | B | B | B | B | B | B | C | A | A | B | A | A | A | A | B | A |
| 11. Proceeds without teacher direction | A | A | C | C | B | A | A | A | A | A | C | C | B | B | B | A | B | B | B | B | A |
| 12. Engages in wide variety of activities | A | A | A | A | A | A | A | A | A | A | A | C | A | A | A | A | B | A | A | A | A |
| 13. Converses, smiles, relaxes in natural manner | A | A | A | A | A | A | A | A | A | A | A | B | A | A | A | A | A | A | A | A | A |
| 14. Continues activity for extended time | A | A | A | A | A | A | A | A | A | A | A | B | A | A | A | A | A | A | A | A | A |
| 15. Voluntarily extends activity beyond school day | B | B | C | C | B | B | B | B | B | B | C | C | B | B | B | B | B | B | B | B | B |
| 16. Participates in evaluation with teacher | A | A | A | A | A | A | A | A | A | A | A | C | A | A | A | A | A | A | A | B | A |
| 17. Prepares effective plans | A | A | C | C | C | A | A | A | A | A | C | C | A | A | A | A | A | A | A | B | A |
| 18. Uses things which have personal meaning | A | A | B | B | B | B | B | B | B | B | C | | B | B | B | A | B | B | B | B | A |

*CODE: A - high degree B - moderate degree C - low degree Blank - not attained

i) The teacher behaviors most evident according to the pre - S.C.P. matrix clearly reflect the effort of the COD staff to select teachers with strong potential for success in the Selected Classroom Project. Teacher accessibility (13), teacher listening ability (14), and teacher encouragement (15) are readily observable behaviors which need to be part of a teacher's role in any classroom format. The data also shows that most teachers had a tendency to be moderately permissive about conversation (5) and movement (6) prior to starting the new approach.

ii) The teacher behaviors which were least apparent before January are those intended to elicit initiation by students assisting students in goal setting (2), personal consultation with students (3), assisting students in making use of resources (4), interrupting the whole class (8). The development of these behaviors was crucial to the success of the Selected Classroom Project.

iii) Chart 3 indicates that the teacher behaviors which were found to be strongest in December (13, 14, 15) continued so or were further strengthened. This result is consistent with the assertion that these particular behaviors are basic to success in all teaching situations. The most significant differences between the December and May matrices are indicated by the strong improvement in assisting students in the use of all resources (11), assisting students in setting goals (2), personal consultation with students (3), appropriate interruption of the whole class (8), providing materials which elicit non-written responses (18). These differences clearly show that S.C.P. teachers did develop those behaviors which would generate student initiative. In most cases, the behavioral changes were extensive and obvious, even to a casual observer.

iv) The student behaviors most evident in pre-test observations (Chart 4) closely parallel or compliment those found strongest among teachers - conversing, smiling, etc. (13), readily seeking teacher guidance (7), having mutual respect (9).
Each of these could be expected as a result of the students' teachers being approachable, encouraging, interested, and having moderately permissive attitudes toward student behavior.

Again, as with the teacher behaviors, the least evident pre - test student behaviors are those which center on student initiative - selects his own goals (1), prepares effective plans (17), chooses creative materials (6), and proceeds without teacher direction (11). If the Selected Classroom Project was to succeed, these behaviors had to be developed.

v) The most striking change in student behavior shown on Chart 5 as compared to that of Chart 3 is in student goal setting (1). Since goal setting was basic to implementing the Selected Classroom Project, this is a direct measure of the program. Other behaviors showing marked change also support increased student initiation - approaches task with a minimum of teacher direction (5), prepares effective plans (17), uses creative materials (6), and selects with whom he learns (3).

2. Control Group

The control group of ten teachers was visited in their classrooms in December and again in May. These teachers and their students, located in a non-Project COD school, showed no appreciable change in their classroom activities from the first to the second visit. See Chart 6.

CHART 6. Control Classrooms (10)-Pre- and Post-evaluation - December and May.

| Selected Characteristics of Teacher(T) & Student(S) Behaviors | Degree To Which Behaviors Were Attained* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C 1 | | C 2 | | C 3 | | C 4 | | C 5 | | C 6 | | C 7 | | C 8 | | C 9 | | C 10 | |
| | D | M | D | M | D | M | D | M | D | M | D | M | D | M | D | M | D | M | D | M |
| T1. Documents specific information interests, problems, progress of each student | C | C | | | C | C | C | C | C | C | C | C | C | | C | C | C | | C | C |
| T2. Assists each student in setting his own goals | | | | | | | | | | | | | | | | | | | | |
| T3. Encourages students to share and cooperate | | | | | A | C | A | | | | A | | | | | | B | | | |
| T4. Encourages free movement | | | | | A | B | A | A | | | A | | | | | | | | | |
| T5. Permits each student to use his own learning style | | | | | C | C | C | C | C | C | | | | | | | | | | |
| T6. Works with small groups and individuals whenever possible | | | | | B | C | A | B | A | C | A | | | | | | | | | |
| T7. Assists students in making use of all resources | | | | | | | | | | | | | | | | | | | | |
| T8. Listens carefully to students seeking assistance | C | | | | A | A | B | B | B | | A | B | | | C | C | A | | C | |
| T9. Helps each student to evaluate his achievements | | | | | B | | A | C | | | | | | | | | | | | |
| S1. Selects own learning goals | | | | | | | | | | | | | | | | | | | | |
| S2. Alters physical setting of room | | | | | | | | | | | B | | | | | | | | | |
| S3. Learns with minimum of teacher direction | | | | | C | B | B | | B | C | A | C | | | | | C | | | |
| S4. Uses materials which encourage creativity expression | | | | | B | | B | C | | | B | | | | | | B | | | |
| S5. Consults with other students | C | C | | | A | B | A | C | | | A | | | | | | | | C | C |
| S6. Proceeds without teacher direction | | | | | C | B | B | C | | | B | | | | | | | | | |
| S7. Participates in evaluation with teacher | | | | | | | C | | | | B | | | | | | | | | |
| S8. Prepares effective plans | | | | | | | | | | | | | | | | | | | | |
| S9. Engages in a wide variety of activities | | | | | C | | C | C | | | C | | | | | | | | | |

Absent

Absent

*CODE: A - high degree B - moderate degree C - low degree Blank - not attained

3. Student Questionnaire

In addition to the observational evaluation, a student questionnaire was developed and administered to almost 100 percent of the students in twenty-nine classes involved with the twenty-one teachers. (See Appendix D.)

a) The Instrument

A twenty-eight item questionnaire was designed to measure students' actions and their attitudes concerning some of the student behaviors which all of the S.C.P. teachers had accepted as desirable in the original agreement.

Questions were formulated to measure the extent to which these behaviors and classroom characteristics existed (from the students viewpoint). For example, the statement that each student will be able to "Demonstrate his responsibility to others with whom he is involved in a cooperative task" was assessed by student responses to questionnaire item six "When you are working with a partner or group can you really depend on others to do their own share?" The statement that students will be able to "Use in a constructive way those moments when help is needed but not available" was measured by the question "If you need help and can't get it right away, do you do other things?" Responses were marked on a five point scale from "never" to "always".

The questionnaire was administered to almost all 800 students in the twenty-nine classes taught by the twenty-one S.C.P. teachers.

b) The Data

The summarization of data from the student assessment scale is based on four broad issues: student self-reliance, student opinion of the program, student-student

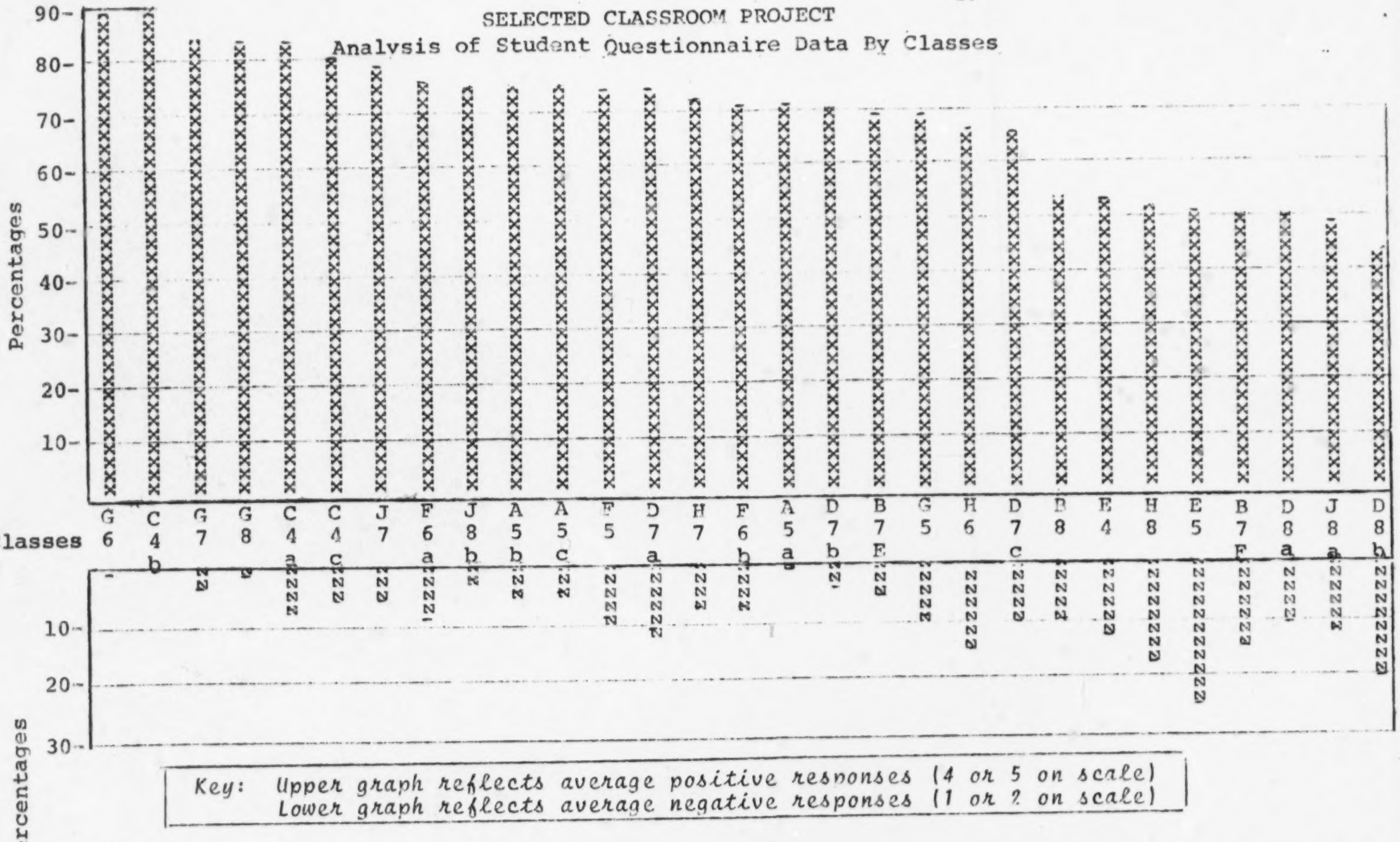
relationships, and student-teacher relationships. While other analytical approaches are possible, this grouping of items seems to be an effective way of relating the data to the expected outcomes of the Selected Classroom Project.

The issues around which the data is organized are basic to the question, "Did actual transformation of the classrooms occur?" If students generally did not perceive themselves as setting their own goals, developing and implementing their own plans and generally being responsible for their own learning, then the classrooms were not "student-centered" by the definition of the Selected Classroom Project. It also is important to note the degree to which students were positive toward the new learning approach, toward each other, and toward the teachers.

The raw data from scoring the questionnaire was converted to percentages of a total class responding at each scale interval for each question. Each class was designated by a three digit code which identified the school (first letter), grade level (numeral), and teacher (second letter if there was more than one teacher). (See Appendix D.)

The data shown in Graphs 1, 2, 3, and 4 was compiled by averaging the combined percentages for all classes of responses falling at levels 1 and 2 (negative - "never" and "not often") and the combined percentages of responses at levels 4 and 5 (positive - "quite often" and "always") for questions which reflect self-reliance, (Nos. 3, 5, 9, 12, 13, 15, 16, 17, 18, 21, 25, 26); student opinion of S.C.P. approach, (Nos. 1, 8, 27, 28); student-teacher relationships, (Nos. 2, 7, 8, 11); and student-student relationships (Nos. 4, 6, 14, 20, 22, 24).

Each of the 29 classes is represented on the bar graphs by the percentage of positive responses and negative responses. The middle level responses (point three on the scale)

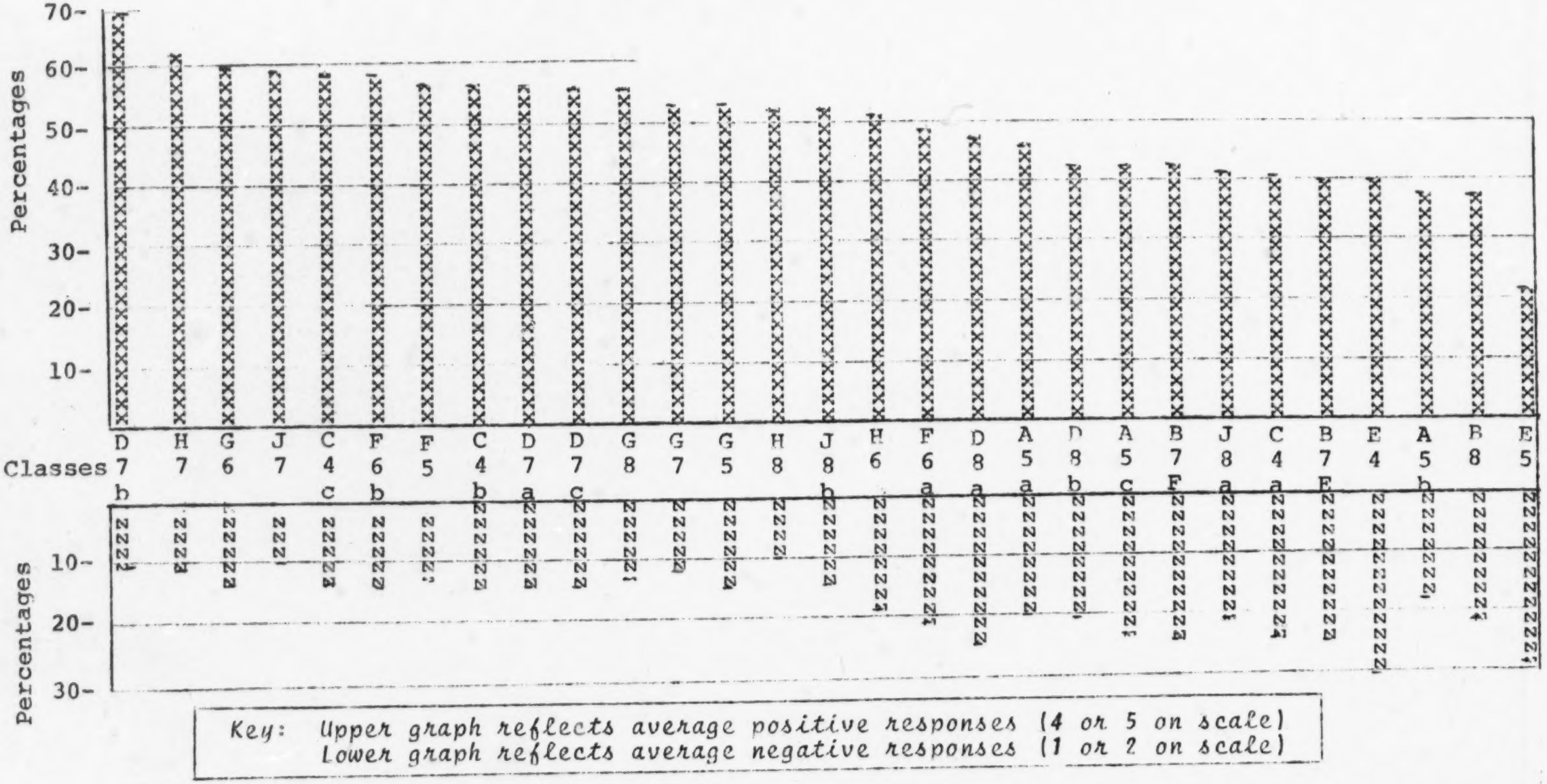



*Key: Upper graph reflects average positive responses (4 or 5 on scale)*
*Lower graph reflects average negative responses (1 or 2 on scale)*

Graph 1 Measures of Student Opinion of S.C.P. Approach-Questions 1, 8, 27, 28.

SELECTED CLASSROOM PROJECT

Analysis of Student Questionnaire Data by Classes

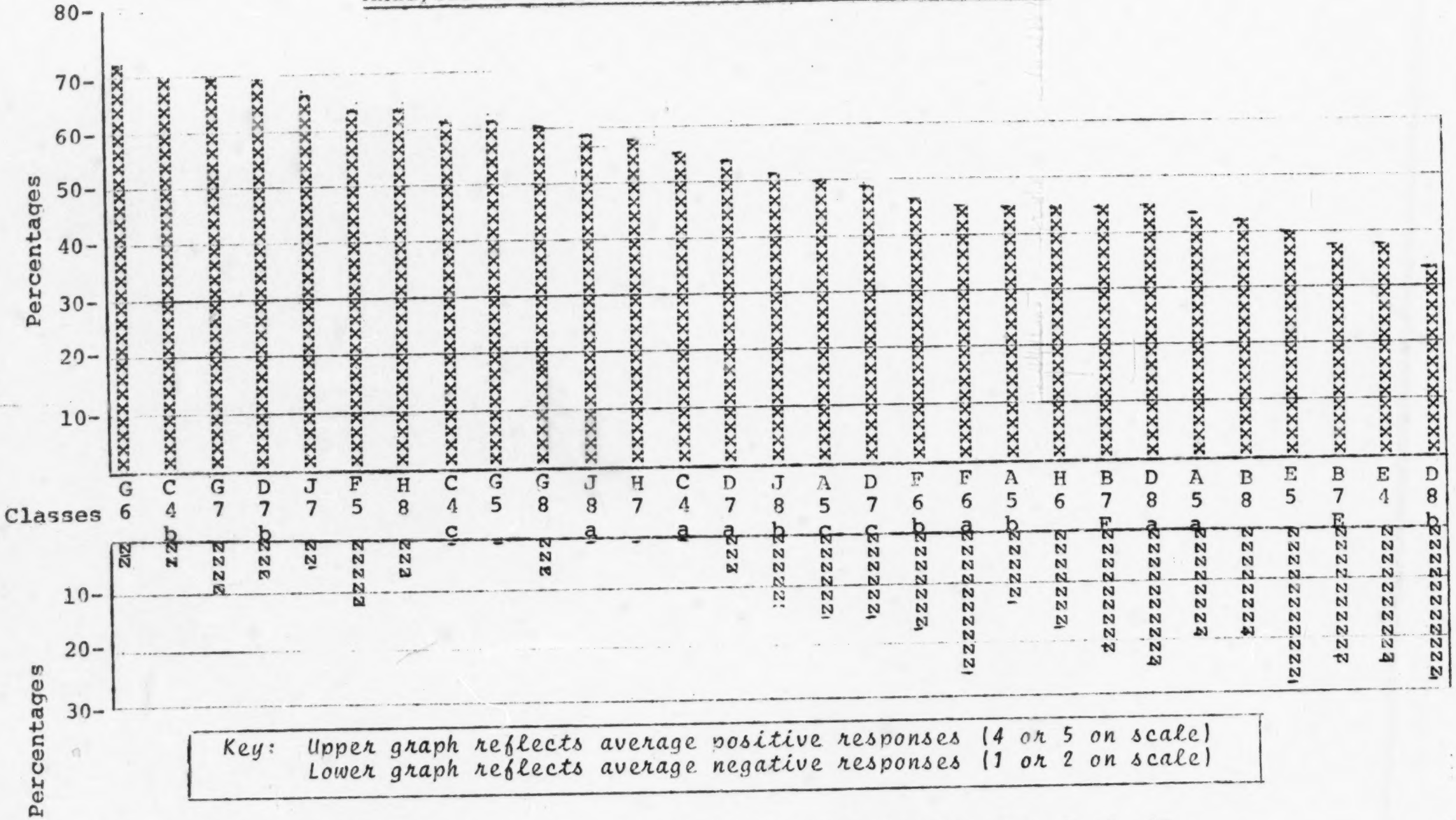



*Key: Upper graph reflects average positive responses (4 or 5 on scale)*
*Lower graph reflects average negative responses (1 or 2 on scale)*

Graph 2 Measures of Student Self-Reliance-Questions 3, 5, 9, 12, 13, 15, 16, 17, 18, 21, 25, 26.

SELECTED CLASSROOM PROJECT

Analysis of Student Questionnaire Data By Classes




*Key: Upper graph reflects average positive responses (4 or 5 on scale)*
*Lower graph reflects average negative responses (1 or 2 on scale)*

Graph 3 Measures of Student-Teacher Relationships-Questions 2, 7, 8, 11.



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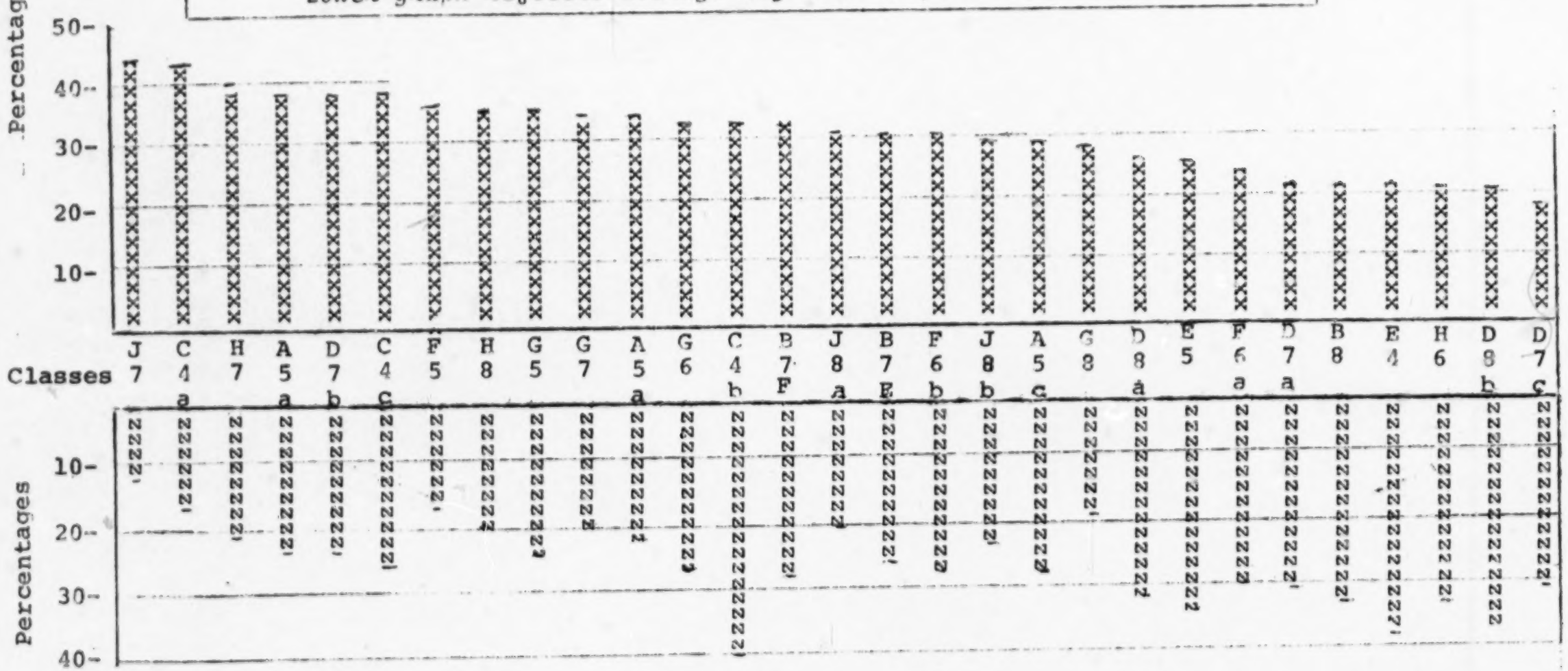
SELECTED CLASSROOM PROJECT

Analysis of Student Questionnaire Data by Classes

Key: Upper graph reflects average positive responses (4 or 5 on scale)
Lower graph reflects average negative responses (1 or 2 on scale)




Graph 4 Measures of Student-Student Relationships-Question 4, 6, 14, 20, 22, 24.



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are not shown on the graphs, but these represent the difference between the sum of the positive plus negative and 100 percent.

c) Interpretation

A review of the four data groups shows that the areas of self-reliance, opinion of the approach, and student-teacher relationships are strongly positive in nearly all classes. Further, their attitudes towards these changes were mostly positive, even among students who saw themselves as having little self-reliance. This is inferred from the lower average negative response evident in the opinion graph as compared to the average negative response on the self-reliance graph.

While students' attitudes toward the teacher and their view of the teachers' attitudes toward them is overwhelmingly positive, their relationships with each other are considerably less so. This may mean that previous student-student attitudes were unchanged or it may be a result of stressing individual goal setting. It may even reflect the ordinary peer relationships at these ages. This is an issue which definitely needs further study in the development of student-centered classrooms.

Because there was no baseline information against which to measure this data, the inferences that these results were caused by the Selected Classroom Project cannot be made. However, observation of these classrooms prior to introducing the changes would lead the staff to conclude that the level of self-reliance then would have been considerably lower had it been tested. In December students exhibited initiative to a very small degree compared to that which was readily observable in the classes in late April.

i) Comparison of Rank Ordering by Grade Levels

The twenty-nine classes, including four fourth grades, six fifth grades, four sixth grades, eight seventh grades, and seven eighth grades, were rank ordered to determine patterns of positive responses according to the four categories referred to previously. The charts below show the number of classes at each grade level falling into the upper and lower thirds of the rank ordering.

CHART 7 Student Self-Reliance

| Grade | Total Number | Number of Classes in Top 1/3 | Bot. 1/3 |
|---|---|---|---|
| 4 | (4) | 2 | 2 |
| 5 | (6) | 1 | 3 |
| 6 | (4) | 2 | 0 |
| 7 | (8) | 5 | 2 |
| 8 | (7) | 0 | 3 |

CHART 8 Student Opinion

| Grade | Total Number | Number of Classes in Top 1/3 | Bot. 1/3 |
|---|---|---|---|
| 4 | (4) | 3 | 1 |
| 5 | (6) | 1 | 1 |
| 6 | (4) | 2 | 1 |
| 7 | (8) | 2 | 2 |
| 8 | (7) | 2 | 5 |

CHART 9 Student - Teacher Relationship

| Grade | Total Number | Number of Classes in Top 1/3 | Number of Classes in Bot. 1/3 |
|---|---|---|---|
| 4 | (4) | 2 | 1 |
| 5 | (6) | 2 | 3 |
| 6 | (4) | 1 | 1 |
| 7 | (8) | 3 | 2 |
| 8 | (7) | 2 | 3 |

CHART 10 Student - Student Relationshi

| Grade | Total Number | Number of Classes in Top 1/3 | Number of Classes in Bot. 1/3 |
|---|---|---|---|
| 4 | (4) | 2 | 1 |
| 5 | (6) | 3 | 1 |
| 6 | (4) | 0 | 2 |
| 7 | (8) | 4 | 2 |
| 8 | (7) | 1 | 4 |

CHART 11 Composite Ranking

| Grade | Total Number | Number of Classes in Top 1/3 | Number of Classes in Bot. 1/3 |
|---|---|---|---|
| 4 | (4) | 3 | 1 |
| 5 | (6) | 1 | 1 |
| 6 | (4) | 1 | 2 |
| 7 | (8) | 4 | 2 |
| 8 | (7) | 1 | 4 |

CHART 12 Rank order of all grades in attitude toward SCP program

| | |
|---|---|
| Most Positive | Grades 4 |
| | Grades 7 |
| | Grades 5 |
| | Grades 6 |
| Least Positive | Grades 8 |

ii) Comparison of Rank Ordering By Types of School-City/Suburban, Public/Parochial

The twenty-nine classrooms were classified according to community size and public/parochial. There were five City public, fourteen Suburban public, and ten parochial (city). The charts below show the number of classes of each type falling into the upper and lower thirds of the rank ordering.

CHART 13 Student Self-Reliance

| Type | Total Number | Number of classes in Top 1/3 | Bot. 1/3 |
|---|---|---|---|
| City Public | 5 | 0 | 5 |
| Suburban Public | 14 | 7 | 4 |
| Parochial (city) | 10 | 3 | 1 |

CHART 14 Student Opinion

| Type | Total Number | Number of classes in Top 1/3 | Bot. 1/3 |
|---|---|---|---|
| City Public | 5 | 0 | 4 |
| Suburban Public | 14 | 5 | 4 |
| Parochial (city) | 10 | 5 | 3 |

CHART 15 Student-Teacher Relationship

| Type | Total Number | Number of classes in | |
|---|---|---|---|
| | | Top 1/3 | Bot. 1/3 |
| City Public | 5 | 0 | 5 |
| Suburban Public | 14 | 4 | 4 |
| Parochial (city) | 10 | 6 | 1 |

CHART 16 Student-Student Relationship

| Type | Total Number | Number of classes in | |
|---|---|---|---|
| | | Top 1/3 | Bot. 1/3 |
| City Public | 5 | 0 | 3 |
| Suburban Public | 14 | 5 | 5 |
| Parochial (city) | 10 | 5 | 2 |

CHART 17 Composite Ranking

| Type | Total Number | Number of Classes in | |
|---|---|---|---|
| | | Top 1/3 | Bot. 1/3 |
| City Public | 5 | 0 | 3 |
| Suburban Public | 14 | 5 | 5 |
| Parochial (city) | 10 | 5 | 2 |

Observations:

Both suburban and parochail school classes show a strong positive response to all areas of the questionnaire. However, the parochial classes show less negative than both public school groups (city and suburban). This is particularly obvious in the areas of student-student relationships and student-teacher relationships. City public schools are overwhelmingly the most negative in all areas.

The positive response of parochial school students can not be explained by any of the available data. However, one significant factor may be that all three parochial schools involved had less than 400 students in the school. Whereas, with one exception, all the public schools were six hundred to thwelve hundred students. Class sizes

did have a tendency to run larger in the parochial schools. The questions of public versus parochial school responses needs to be explored further.

iii) Comparison of Rank Ordering by Years of Teachers' Experience

The twenty-nine classes (having twenty-one teachers) were rank ordered according to positive responses on the four scales, using teaching experience of less than five years and more than five years as the comparative variables. The charts below show the number of classes falling into the upper and lower thirds for each variable.

CHART 18 Student Self-Reliance

| Years of experience | Total Number | Number of classes in | |
|---|---|---|---|
| | | Top 1/3 | Bot. 1/3 |
| Less than five | 17 | 4 | 8 |
| More than five | 12 | 6 | 2 |

CHART 19 Student Opinion

| Years of experience | Total Number | Number of classes in | |
|---|---|---|---|
| | | Top 1/3 | Bot. 1/3 |
| Less than five | 17 | 5 | 8 |
| More than five | 12 | 5 | 2 |

CHART 20 Student-Teacher Relationship

| Years of experience | Total Number | Number of classes in | |
|---|---|---|---|
| | | Top 1/3 | Bot. 1/3 |
| Less than five | 17 | 4 | 9 |
| More than five | 12 | 6 | 1 |

CHART 21 Student-Student Relationship

| Years of experience | Total Number | Number of classes in | |
|---|---|---|---|
| | | Top 1/3 | Bot. 1/3 |
| Less than five | 17 | 6 | 5 |
| More than five | 12 | 4 | 5 |

CHART 22 Composite Ranking

| Years of experience | Total Number | Number of classes in Top 1/3 | Number of classes in Bot. 1/3 |
|---|---|---|---|
| Less than five | 17 | 4 | 8 |
| More than five | 12 | 6 | 2 |

4. Teachers Questionnaires

Since the basic thrust of the Selected Classroom Project was to assist teachers in making a transition, documentation of the teachers' views and reactions was essential. The COD staff constantly was collecting data informally but at two points, the end of phase one and phase two, formal questionnaires were completed by S.C.P. teachers. The data collected is reported as both narrative and statistical. (See Appendices B and J.)

In examining the teachers questionnaire data, the most striking responses are in the affective areas. In the first questionnaire teachers were asked to list those expectations (which they had for the Selected Classroom Project) which seemed most fully realized. Responses included-

> "To see if kiddos can learn with a minimum of teacher direction" (self motivation); "To observe how discipline is affected by different teaching methods" (self control); "To develop a stronger relationship between the students and myself" (communication).

The second questionnaire included similar affective responses when teachers were asked to list the five most desirable characteristics of their classrooms.

> "Very positive student-teacher relationship"; "My knowledge of the student is wider and much more personal"; "...more normal operation relative to human behavior"; "Greatly increased student enthusiasm"; "A very relaxed cheerful atmosphere"; "Students are freer".

The negative responses in both the first and second questionnaires dealt with more specific issues, often centering on certain students, and organizational or resource limitations:

> "A few students who have been excellent achievers showed a lack of initiative in choosing their own goals"; "The passitivity and inapproachability of some of the students"; "A few students are having difficulty handling new freedom"; "Lack of time when I could be available to students so that the program could run smoother"; "Not enough time to see everyone and everything I'd like to"; "Mess! I still can't get kids to put things in the proper place".

The statistical data also indicates strong support for the S.C.P. approach on the part of most teachers. When they were asked to rate their overall level of satisfaction with their own classrooms (in February), nine teachers responded at a "high" or "very high" level, and only two at "low" level. The April questionnaire shows thirteen teachers at the "high" or "very high" levels, while "low" level remains at two. This increase in satisfaction strongly indicates that a significant number of S.C.P. teachers have indeed made a transition.

Other questions concerning levels of satisfaction with student and teacher performances show a similar increase in the level of satisfaction. Both questionnaires collected encouraging data about the future use of the S.C.P. approach and about COD's role. In February, sixteen teachers intended to expand or continue the approach, no teachers withdrew (as they could have decided), and only one chose to reduce his involvement. In April sixteen said they would like to have the same type of classroom next year.

The level of satisfaction with the role of the COD staff was also high. In February seventeen teachers saw the COD staff as "helpful" or "very helpful" and only one did not feel that

much help was provided. The April results showed that seventeen teachers felt the COD staff was "helpful" or "very helpful", and three didn't think that COD gave much assistance. It is interesting to note that all three teachers expressing dissatisfaction with COD's role were in the same school. They are the same teachers referred to in Section III E 5.

5. PROSE Evaluation

Through the analysis of the diary entries (640 statements), a number of important conclusions have been reached concerning the reactions of the S.C.P. teachers. (See Appendix H for complete details and all further references in this section.)

a) The work of the COD staff overall was rated very highly (Table 7). This stands as evidence of the importance of the advisor role referred to elsewhere in this report. (To expect meaningful behavioral change without some internal or external support system is unrealistic, in the light of these teachers' reactions.)

b) The teachers' activities which were provided by Project COD for orientation, stimulation, and professional and personal growth were rated as effective (Table 9). As pointed out in the narrative (p. 19), the frustration and personal insecurities generated by these experiences depressed the statistical analysis, but this was an expected outcome. Visiting other classes and schools was the most significant input.

c) The several meetings, workshops, and other group activities were well received by those who made reference to them in the diary (Table 11).

d) Changes in teachers' roles were viewed introspectively with mixed, but predominately positive, reactions (Table 13). It should

be noted that the selective process which brought these teachers into the project is probably a factor in this positive assessment. These tended to be teachers who sought role changes, and they had positive expectations which were somewhat self-fulfilling.

e) The teachers' reactions to changes in students' roles (the students' motivation, self-direction, interest, achievement, discipline, and involvement) included the largest quantity of teacher response (Table 15). Although the mean reaction was less positive to the changes for students than for those which the teachers experienced, it may be that the personal judgement of one's own behavior tends to be sharper than similar judgement of others. The excerpted comments (pp. 30-35) shown in relation to the time span of the project point up the very definite developmental aspect of the entire change process.

f) Very positive reactions to the changes in learning style and content were noteworthy (Tables 17 and 19). While this was the "product" of the project, the arrival at appropriate activities and content was a very individual process. The classroom activities of the twenty-one S.C.P. teachers looked much more different than alike. The frustrations felt by many teachers at various times were often tied to (the teachers or students) introducing a modified or new activity, which again was part of the project; such frustration was expected and legitimate.

g) The PROSE data supports the observation of the COD staff that other teachers were influenced to some degree by the work of the S.C.P. teachers (Table 21). The negative reaction of some was offset by the interest of others. In several instances other teachers informally or formally joined or prepared to join the S.C.P. teachers.

h) As a side note, the use of this unique approach to evaluating a main dimension of the Selected Classroom Project deserves comment.

The highly personal approach of the COD staff to bringing about real change developed a deep-rooted commitment on the part of the teachers. This is visible in the teachers' comments. The treatment and analysis of the data substantiates many of opinions gathered by the staff in their work. This is a technique which should be explored further and extended to other areas in which human behavior is to be modified.

6. Principals Questionnaire

In the original Selected Classroom Project proposal it states that, as a prerequisite to the involvement of any teacher, "there is clearly communicated support from the supervisors and administrators involved with the particular teacher's situation". The COD staff was concerned most with the role of the building principal (there were eight involved). At the end of the second phase, a questionnaire was given to these principals in order to document their views on the Selected Classroom Project. (See Appendix K.)

The generally positive attitudes found in the teacher questionnaires are held by the principals. When asked to mark their general level of satisfaction with the Selected Classroom Project, seven pricipals chose either "valuable" or greatly exceeded my expectations", while one said "ok". The fact that none of the principals was negative is significant. The principals also were asked to indicate their level of satisfaction with teachers' performance. Eighteen of the teachers were designated as having "improved over past performance" or "did extremely well", while only one was placed at "did less well than previously". The principals' view of student behavior was equally positive.

Principals were asked to list the most significant positive and negative results of the Selected Classroom Project. As in the case of the teacher questionnaire, the results listed as most positive were mainly affective-

"The development of a positive attitude toward school by pupils"; The students have been able to establish a one-to-one relationship with each teacher"; "Teachers were more relaxed teaching"; "A tremendous lessening of negative verbalizations from teacher to students about insignificant rules, etc".

There were also comments having to do with the quality of teaching and learning-

"Ability of pupils to evaluate themselves"; "One classroom showed marked improvement in subject matter presentation and results"; "Opened the door to new ways of teaching".

The negative results noted by principals were concerned mostly with community or parental reaction and with students' ability to handle freedom.

"Parent reactions in some cases were quite negative"; "Rumors grew up in the community"; "A few pupils developed a disrespectful attitude in their personal relations with their peers and their instructors"; "Some students will always seek teacher direction".

There was also concern by some principals for subject matter-

"Some subject areas could be overlooked."

Principals were asked to evaluate the role of the COD staff. All principals felt that the COD staff had been "helpful" or "very helpful" to teachers. Nearly all also saw the COD staff as being helpful to them as principals. There were several comments that COD might have helped to prepare parents to a greater degree. Other data in the questionnaire showed that nearly all principals felt they personally had a meaningful role in the project and all would encourage the S.C.P. teachers to continue in the same manner during the next school year.

7. Seventh Grade Survey

In one school, an independent study was conducted by a guidance counselor to determine the attitudes of two seventh grade classes toward their participation in the Selected Classroom Project. The details of this study are reported in Appendix L. Basically, 92 percent of the students reacted positively, and 77 percent felt that they derived as much or more learning from the S.C.P. approach. Examples of student comments add to the interpretation of the data, as do the recorded impressions of the counselor.

## V. Dissemination

The effectiveness of the twenty-one teachers in bringing about a new type of classroom led to using these teachers as resources to help other interested educators. The teachers opened their rooms to visitors from other schools (and from their own schools to a limited extent - the fact that people were coming some distance to view these classrooms made some of the S.C.P. teachers' colleagues curious enough to go in). Four issues of the CREST, COD's newsletter carried stories about the S.C.P. classes.

All teachers participated in two S.C.P. conferences which over 400 persons attended. Several teachers joined the COD staff in making presentations at a number of major conferences which are detailed in following sections. Other speaking engagements, a series of newspaper articles, a two-hour radio talk-show interview, and a fifteen-minute videotape presentation rounded out the dissemination of the Selected Classroom Project.

### A. Newsletters

Beginning in November of 1970 there were four newsletters prepared and mailed by the COD staff to 1100 area educators and lay people. The November issue indicated that COD was "shifting gears" by narrowing its activities to focus on the S.C.P. teachers. This same newsletter also carried excerpts from an article written by Sr. Theresa Fortin with whom COD had worked to develop a more "student-centered" classroom during the previous year.

Newsletters distributed in December and February were progress reports on the S.C.P. classrooms. The participating teachers were identified and specific descriptive comments about actual student activities were included. An S.C.P. teacher wrote an extensive description of her own classroom for the February issue. The February issue also contained a separate invitation to visit S.C.P. classrooms during visitation days. The April newsletter announced two conferences sponsored by the COD staff and the twenty-one teachers. These are described in the next section.

B. CONFERences

At the March 12 workshop the COD staff and the S.C.P. teachers discussed the possibility of holding a workshop or conference as a means of sharing the successes of the Selected Classroom Project with other teachers or administrators who might be interested.

Most agreed that there are problems to be faced by teachers and administrators as they start to develop open classrooms. Where and how do I start? What is my role? What will my classroom look like? What about grades? How do I teach basic skills? How will parents react? Will students really learn? They further agreed that since they had faced these problems themselves their experience would be helpful to others starting out.

Approximately 450 persons attended two conferences on the Selected Classroom Project which were held at the Middle School in Dartmouth on April 28, and at the Hyannis West Elementary School in Barnstable on May 6. The purpose of these sessions was to use the experiences of the twenty-one teachers in conveying the spirit and techniques in the operation of the Selected Classrooms.

Advance notices were sent to all 27 participating school systems. The CREST, COD's newsletter, carried the announcement to 1100 educators and some S.C.P. school principals sent invitations to parents of their participating students.

The program was structured so that the S.C.P. teachers and some students from their classrooms were available as resource personnel. After a brief presentation of the general approaches used, the conferences provided two hours in which the attendees could discuss informally the various classrooms with the teachers and students.

Display areas for each school were set up in the library at Dartmouth and in the cafeteria at Hyannis and included samples of classroom activities, as well as movies, video tapes, and slides which the S.C.P. teachers felt best could describe their own classrooms. Materials were distributed

which would be of help to teachers who want to establish these kinds of classrooms. (See Appendix E.) The COD staff distributed background information on each school and its S.C.P. classrooms.

Because the Dartmouth conference was held in an S.C.P. school, the Dartmouth teachers used their own classrooms as display areas. Those attending were free to examine the rooms and the student work in progress. In addition, a group of Fall River Middle School S.C.P. students used the auditorium stage to present a continuous showing of a variety of plays which they had written and produced.

C. Visitations

Forty teachers and administrators responded to COD's invitation to visit the S.C.P. classrooms. The general format for a visitation was to have a member of the COD staff orient a small group of visitors (2-8) to the objective and nature of S.C.P. classrooms prior to entering them. The visitors were then taken to those S.C.P. classrooms which most closely corresponded to their subject and grade level interests. Conversation with students was encouraged, and the S.C.P. teachers answered questions as time permitted.

D. Workshop and Conference Presentations, and Speaking Engagements

The COD staff was invited to present the S.C.P. story at several major conferences. Most of these presentations involved teachers from the S.C.P. classrooms:

1. Regional Conference on the Humanities, Boston University, March 27, 1971. - Two members of the COD staff and one S.C.P. teacher showed a video tape of an S.C.P. classroom (see part G. below) and presented an overview of the Selected Classroom Project to two groups totaling 100 persons.

2. Annual Meeting of the National Council of the Teachers of English, Boston, April 19. 1971 - Three members of the COD staff and an S.C.P.

teacher made a similar presentation to 25 persons.

3. Annual Convention of Teachers, Fall River Dioceses, Attleboro, Mass., May 6, 1971 - two members of the COD staff and two S.C.P. teachers presented an overview of the Project and described specific classroom situations with a slide presentation to over 400 educators.

4. New England Program in Teacher Education Conferences, Cranston, R. I., June 2, 1971 - One COD staff member and four S.C.P. teachers presented an overview of the Selected Classroom Project and handled basic questions about implementation of an open classroom to three groups totaling 60 teachers and administrators.

5. Cape Cod Chapter of the International Reading Association, Harwichport, Mass., May 5, 1971 - One COD staff member gave the background and an overview of the S.C.P. classrooms to 75 educators.

6. Classes in education at Southeastern Massachusetts University, Dartmouth, Mass, April - One COD staff member spoke to several different classes totaling 100 students about the philosophical background, characteristics, and practices of S.C.P. classrooms.

E. Newspaper Coverage (April, 1971)

The New Bedford Standard Times published an outstanding series on the S.C.P. classrooms. (See Appendix M.) The four articles were prominently placed in the Sunday edition of the paper. Each of the first three described a specific S.C.P. classroom situation and the final article highlighted the role of the COD staff. (Newspaper circulation is approximately 100,000.)

F. Local School Workshops

Somerset, Mass., May 12 and 18 and Barnstable, Mass., May 19, 1971 - The workshops in both locations were conducted by COD personnel at the request of the faculties who wanted to know more about

the implementation steps in developing a S.C.P. classroom. One school contained two S.C.P. teachers whose success stimulated twenty-one colleagues to participate in the two workshops. The Barnstable workshop grew from interest stimulated by the S.C.P. Conferences (see part B above.) These workshops dealt mainly with specific questions about the implementation of the S.C.P. approach. Two of COD's staff worked with a total of 35 teachers.

G. Videotape

A member of the COD staff taped a block of time from an S.C.P. classroom. This tape was then edited and narrated by the teacher. The tape was used extensively to demonstrate the essential characteristics of the S.C.P. classrooms.

H. Radio, Open Line, WBSM New Bedford

May 25, 1971 - Two members of the COD staff gave an overview of the S.C.P. approach and responded to telephoned questions from listeners during a two hour evening period. The program has a listening audience of approximately 10,000 persons.

VI. Conclusions

1. Teachers who are traditionally oriented can plan and implement open classrooms in a short period of time.

   a) Participation hy teachers must be voluntary.

   b) Teachers of all ages, experiences, and backgrounds can make the transition but experienced, emotionally secure, conventional teachers who have a constructive relationship with students have the best prospects for success. (Many attempts at educational change have pushed aside the teacher with ten or twenty years of conventional teaching experience as being too slow to respond. These teachers proved to be the most successful in the Selected Classroom Project.)

   c) Visible administrative support for teachers who are making changes is a necessity, and actual administrator participation in the classroom is highly desirable.

   d) All teachers undergoing change need someone to consult with at frequent intervals and in a highly personal way.

   e) Those filling advisory (consultant) roles should be able to form the necessary close personal relationship with each teacher.

   f) The advisors must at least understand and support the purposes and direction of the changes, even if they do not have the actual experience in the new practices. The advisors should also be prepared to learn from the teachers, as this approach will stimulate some teachers to exceed original expectations for change.

g) Teachers should begin the transition to a more open classroom by retaining those elements of the conventional setting which they need in order to feel reasonably secure.

h) Starting the program quickly in the classroom with a minimum of intellectualizing (assuming that teachers understand the concept and the introductory process) is an effective way to make the transition.

i) Teachers need some very specific means, such as procedures for goal setting, in order to effectively begin to open their classrooms.

j) If two or more teachers can work together, and if less experienced and more experienced teachers can be linked, the results will be more effective and lasting.

k) An open classroom generally is not a solution for a teacher who is disorganized or who has antagonistic relationships with students. While open classrooms do reduce teacher-student tensions, they do not "cure" personality problems or remediate poor habits.

2. Although most students in grades four through eight benefit from this learning approach, it is not appropriate for all students.

a) The large majority of students in grades four through eight are capable of setting their own goals and operating in a responsible manner in an open classroom setting under average conditions.

b) The majority of these students view an open classroom as more desirable than a conventional one.

c) Students are willing and capable of relating closely to a teacher in an open classroom.

d) There are a few students in most classes who will not function well in an open classroom, even after extended periods of time. Alternatives which have more structure should be available, and each student should be able to select the most appropriate learning situation for himself.

e) Even in an open classroom, most students need the security of some clearly stated basic rules concerning personal behavior and the learning format. (As in a traditional classroom, if students lack order or structure for their behavior, they often become insecure and engage in irresponsible and destructive acts.)

f) While heterogeneous grouping is most consistent with the philosophy of an open classroom, homogeneous groups at any ability level should be able to function effectively.

g) Eighth grade students seem to have more concerns about selecting their own learning than do younger students. (This might be related to their concern about entering content-oriented high schools and/or their maturational problems. Further study is needed.)

h) Students can play a large part in altering the physical setting of a classroom, and this improves their attitude towards being a part of that classroom.

i) Special attention needs to be given to student-student relationships in an open classroom. Students can become so involved with their own interests that they are not conscious of the needs of others.

3. Flexibility in using space and resources is essential for open classrooms but this does not require modern buildings. Older facilities often have much more flexibility than they are credited with.

a) Sharing of resources promotes cooperation among students and teachers in a natural way.

b) Schools of any size can succeed in initiating open classrooms, but those which have small administrative units (a few hundred students) and have established strong interpersonal relationships have a better chance for success.

c) While a modest student-teacher ratio is desirable, teachers (depending on personal capabilities) can operate open classrooms with ratios as high as forty-to-one.

d) Open classrooms can be initiated without extra expense or special privileges for the teachers involved.

e) Open classrooms need and readily support the use of a variety of resources (professional and lay adults, time, and materials).

4. Clear communications between teachers, students, administrators, and parents is essential for success of this program.

   a) Administrators and teachers should informally assess the "character" of the community and its expectations for education. (There are members in every community who will view the open classroom as a breakdown of school authority and a lessening of real learning. If the number of these persons seems significant, the school's communication efforts must be more sophisticated.)

   b) Parents need to be informed in a "matter of fact" manner about changes in classroom procedures. The schools should avoid fanfare and educational jargon in communicating so that unrealistic expectations will not develop. The label "experiment" is unjustified in reference to open classrooms and should not be used.

c) Teachers and administrators who already enjoy the respect of parents will have less difficulty in communicating the changes and having them accepted by parents.

d) Some form of written evaluation of a student's efforts, developed cooperatively by both student and teacher, is appreciated by most parents and strengthens their support of the changes in classroom operation.

e) Other faculty members need to be kept informed about developments in open classrooms but they should not be pressured to participate.

f) The closer relationship between students and teachers in this type of classroom establishes new levels of communication and becomes a very powerful "tool" for teaching.

## Appendices

A Planning Guide

B Teacher Questionnaire No. 1 and Summary of Data

C Workshop On Symbolic Arts

D Student Questionnaire and Summary of Data

E Dissemination Materials

F Student Goal-Setting Form

G Criteria and Interview Questions, Student Goal Setting

H PROSE Daily Journal and Reports

I Classroom Observation Checklists

J Final Teacher Questionnaire and Summary of Data

K Principal Questionnaire and Summary of Data

L Seventh Grade Survey, A. J. Figueiredo

M Newspaper Articles and Editorial

# Appendix A

## Planning Guide

P R O J E C T  C O D
ESEA Title III

# S E L E C T E D  C L A S S R O O M  P R O J E C T

## Planning Guide

This guide is designed to serve two purposes. It is a sequence of steps upon which to base your planning for the first phase of the project, and it will become a record of that plan which can be shared with others. Since this project is being carried out with a small number of teachers, it is important that a written record of your efforts, whether successful or otherwise, be available.

On the following pages the various segments of the project are listed, with a brief commentary for each. It is essential for each teacher to consider all the questions involved, and your responses to these will form the basic plan for you to develop in your classroom during the first phase.

# S E L E C T E D  C L A S S R O O M  P R O J E C T

## A. Orienting Those Who Will Be Involved

Question 1. How will I communicate to my students, to other teachers, and to parents the purposes and nature of my classroom?

Both students and teachers need a period of time to be introduced to the concept of a "student-centered classroom". Provisions for you include opportunities to read a statement of the objectives for such a classroom, to ask questions of the COD staff (interview), to decide whether you would participate, to work with other teachers with similar objectives, to have some guidelines for planning, and to have personal consultation while preparing a plan. Communication with students needs to be equally comprehensive. As a first step in planning, it is suggested that you prepare a means of introducing students to the "big picture".

Question 2. How will I communicate to other teachers working with the same children about the purposes and activities of my classroom?

Your classroom situation will probably be encouraging children to learn in a way which is markedly different from that encouraged by other teachers. It is likely that the children will begin to compare and react to the different "norms" of behavior expected of them. If another teacher's first insight into your classroom comes when a child asks,

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"How come we can't talk, etc. in here like we do in Mr. X's class?" there will probably be a defensive reaction. Discussing some of your plans and extending an invitation to visit your classroom may help.

Question 3. How will I communicate to parents the purpose and nature of my classroom?

It is important that parents do not get the impression that some kind of "experiment" is being performed with their children. The kind of classroom you are working toward is well established as a legitimate way of learning. Probably it is not necessary to make a comprehensive presentation to all parents in the early stages of this project. The best form of communication might be to ask the student to show his folder to his parents and provide some place for them to comment. Parents may make inquiries as to why a student is always "looking for stuff" to take to school, or, if the situation is successful, why an increase in his enthusiasm. A few students may be threatened by being asked to set their own goals (possibly because of an overdependence on the teacher or a strong drive for traditional achievement and rewards) and cause parents to be concerned. These parents could be invited in for a visit to the classroom.

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If you feel that it is really necessary (or desirable) to advise the parents about some new activities which are planned, a note sent home with the following message might suffice:

Dear Parent,

During the next few weeks our _____ class is going to be working on some new activities. Probably your child will keep you informed as to what he is doing. If you have any questions, please give me a call.

_____
Teacher

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## B. Knowing The Students

Question: How can I add to my knowledge about the interests, abilities, and learning preferences of my students?

A teacer's understanding of any particular student is often quite limited. Part of your planning effort should include a means for learning more about each of your students. Perhaps a simple questionnaire given in the next few weeks would be helpful. Some of the information that you might seek could include: hobbies, important experiences (travel, adventures, people known, etc), things disliked, things enjoyed, preferred ways of learning, skills, interests of parents or other members of the family, etc. This information can be placed in a folder which you share with the student and may be used as a reference for goal setting and planning.

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## C. The Setting

Question: What are the limitations in my teaching situation?

These limitations may be ones that you impose and/or ones that are a part of the school. An example of a limitation might be the selection of a subject area in which to begin this project. The word "limitations" is not being used to indicate either a positive or a negative condition. However, stating the limitations felt necessary in the beginning can help you to see whether the objectives sought are practical in your situation. Some of the areas of limitations besides subject matter might include physical movement, changes in layout of a room, time, materials, safety, space, etc.

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## D. Setting Achievement Goals

Question: What is my view of an achievement goal and how can I help students to determine theirs?

The assumption behind student goal setting is that all students potentially can identify their interests and needs. Some students need only be introduced to the idea of setting their own goals and they will be "off and running". Others will require patient counselling in order even to begin the process. You will prpbably need to plan some format by which students can learn to write a clearly stated goal. The initial goals written by students may be superficial, vague, and unimaginative sounding [I'm going to learn about airplanes.]. By asking a few key questions, you can usually help a student without discouraging him [e.g. What are some of the things that interest you about airplanes?, Have you ever flown?, What was it like?, What kinds of planes interest you the most?] The answers to these questions may produce a more specific goal [I am going to learn what makes an airplane fly.].

A goal statement should also contain some indication of means as well as ends. [What are some of the ways you could find out how an airplane flys? -talk to a pilot, read a book, build a model, etc.] The goal might then read [I

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am going to build a model airplane which I will use to learn how an airplane flys.] Another way of stating goals is to word them as outcomes [I will have built a model airplane and be able to explain how it flys.] The procedure for goal setting should include a step whereby a student checks the feasibility of his goal with you. This need not mean that a student stops all activity (planning) until he sees you, but rather, that he consults you before he starts planning or at some early stage.

The idea of goal setting is to help students to consciously act on the basis of their own interests. Goal setting need not become another kind of teacher assignment which "gets done". The kind of encouragement students receive from you will have much bearing on how close the goals they set correspond to their real interests. If you seem to convey that reading about things is the most important way to learn, then most students will avoid hammering, drawing, singing, acting, etc. in goal setting. Try to open up learning options as part of helping students set goals.

# S E L E C T E D  C L A S S R O O M  P R O J E C T

## E. Planning For Meeting Achievement Goals

Question: How am I going to help students plan their activities?

Students will have to make some plans (as you are making here) as a part of reaching their goals. There are many "systems" for planning but most come down to answering a few basic questions (assuming the goal is set).

a. What are the ways in which I could achieve my goal?
b. Which one(s) seems best for me?
c. What kind of "stuff" will I need to do it?
d. Where will I get the stuff?
e. What will I do with the stuff?
f. How much time will I need?
g. How will I use the time?

Students need to see planning as a practical step and not just as a sheet which is prepared to keep the teacher happy. Both planning and goal setting will be different for different students. If a student has a very hard time writing, or balks at any writing, then you may have to be satisfied with a few simple statements [maybe even write it for him or have other students do it]. Others can be encouraged to prepare elaborate timetables. The length of time planned will also vary with the capability of a particular student to sustain an activity. Maybe some should only try to plan two or three days at a time, while others may be ready for a week or two.

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## F. Resources

Question: How can I help students to use a greater variety of resources in learning?

Every person and object which exists is a potential resource for learning. However, classroom practice often leaves a student with the impression that books are the most important source of learning. Your efforts in the classroom can help students (also teachers) to overcome this impression. Some specific resources which could be considered include: the teacher (as a person), other students, parents and friends, things in and out of the classroom and school, and things in the home and community. It is hoped that much student activity will utilize materials and ideas obtained on his initiative outside of school. The degree to which this carryover happens is one good measure of your classroom's effect on the student.

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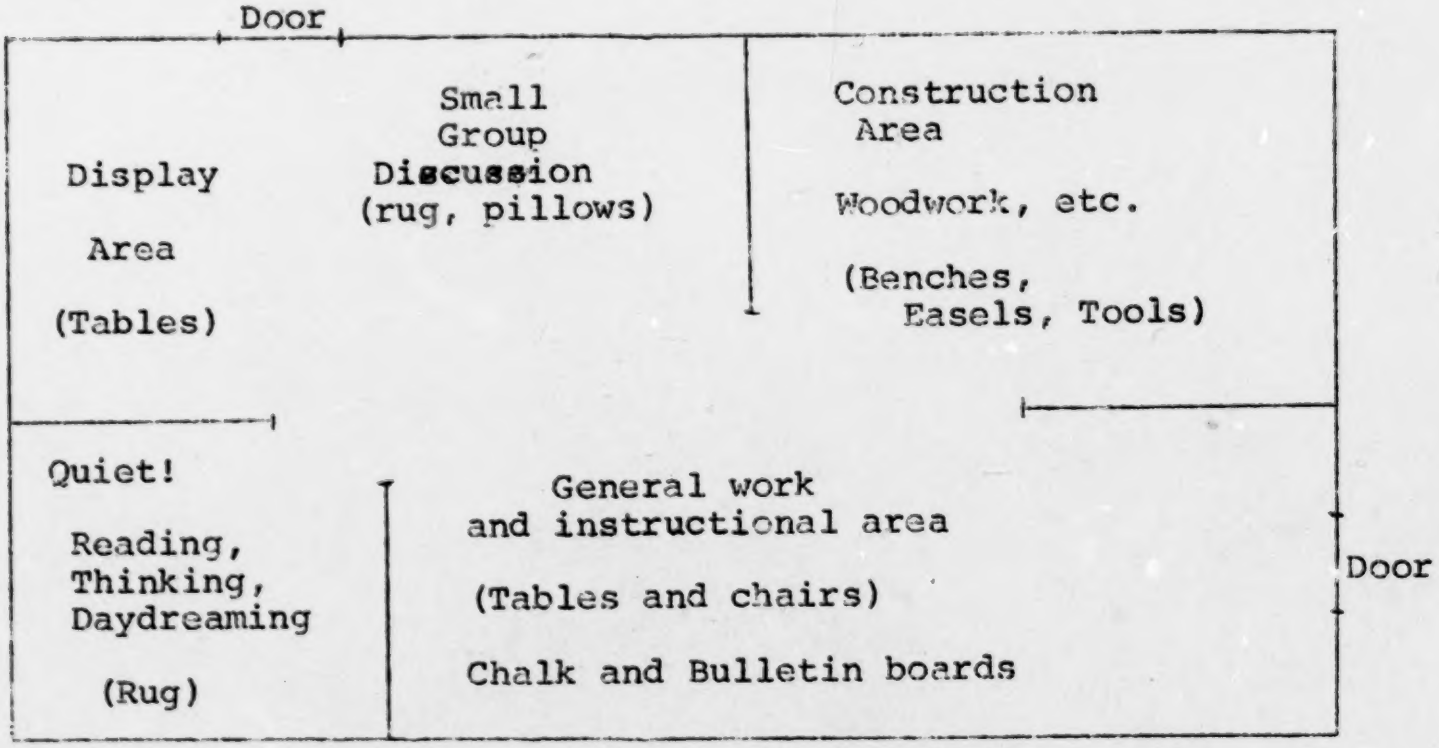
## G. Room Layout and Use

Question: What changes in the physical setting of my classroom might enhance student activity?

Sometimes it is helpful to develop general areas in the classroom for different kinds of activity: for example:




Drawing the floor plan of your room and testing the possibilities would be useful. As students become involved with their goals, they will probably begin to suggest and initiate change in the physical setting. Students enjoy moving furniture, putting up displays, and generally personalizing classroom space.

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H. Evaluation

Question: How might the student and I evaluate the results?

Evaluation needs to be a cooperative process in the "student centered classroom". It need not be based on some decision at the end of an activity, but rather it can be a continuous process.

As an example:

Each student could have a folder in which he places a statement of his goals, a copy of his plan, and some record (diary) of his progress. The teacher, in the same folder, can write comments about the goals, plans, and progress while in consultation with the student. This folder could then be sent home to the parent as a documentation of the student's activity. If a letter grade is necessary, it could be a result of an agreement between the teacher and the student.

This example illustrates an "open system" of evaluation and record keeping. Both student and teacher have full access.

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## I. Recycling

Question: What do the student and I do after he has achieved a particular goal?

Here you need to work out a procedure whereby both you and the student know what the steps are to draw one activity to close and begin another, or extend the one in which he is involved. The clearer students are on basic procedural questions, the more free you will be as a teacher to consult with students on the more important aspects of learning.

# S E L E C T E D  C L A S S R O O M  P R O J E C T

## J. Relationships

Question: How will the students and I deal with problems of interpersonal communication and cooperation?

The "student-centered" situation encourages people to move, talk, and engage in a host of different activities. This means that situations involving the relationships among individuals and between an individual and groups will be an important and constant consideration. It would be helpful, as part of your planning, to identify some general situations that might prove difficult, and to include some alternative solutions to any anticipated problems.

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## K. Teacher Behavior

Question: What is the effect of my personal behavior on that of students, other teachers, administrators, and parents?

The way in which you behave toward others often determines their response to you. It is possible to tell students that they should feel free to speak with each other or with you at anytime. However, the way in which you act when they do speak is the real test of your sincerity. A similar statement could be made about all your expectations for this project. If in the process of goal setting, you are obviously uncomfortable when a student honestly expresses his goals, he will begin to develop goals that are meant mainly to satisfy you. Some time spent talking with a member of the COD staff after a classroom visit might be helpful in assessing your behavior as it effects your students.

Appendix B

1. Teacher Questionnaire - February Workshop
2. Summary of Teacher Questionnaire Data

Selected Classroom Project

Project COD
52 Ash Street
New Bedford, Mass. 02740

February Workshop

Instrument 1

Please leave this questionnaire with Larry, Jerry, or Bill after evening discussions.

An Assessment of Your Situation at This Point

1. What were the most important expectations you had for this project at the start?

   1._____

   2._____

   3._____

   4._____

2. Which of these expectations have been most fully realized, which least realized?

   Most_____

   _____

   Least_____

   _____

3. What were the most important reservations you had at the beginning of this project?

   1._____

   2._____

   3._____

   4._____

4. Which of these reservations have been justified by your experience in the last six weeks?

5. What were the most significant positive results of this project that were <u>unexpected</u>?

6. What were the most significant negative results of this project that were <u>unexpected</u>?

7. a) At this point, what is your overall level of satisfaction with your classroom in the project?

check one space

| very low | low | ok | high | very high |
|---|---|---|---|---|

b) At this point, what is your level of satisfaction with your performance as a teacher in this project?

check one space

| very low | low | ok | high | very high |
|---|---|---|---|---|

c) Please assess the current level of your personal competence in each of the following teaching skills:

| | very low | low | ok | high | very high |
|---|---|---|---|---|---|
| 1. helping a student identify a goal | | | | | |
| 2. helping a student develop a useful plan | | | | | |
| 3. helping students locate resources | | | | | |
| 4. listening to students | | | | | |
| 5. asking questions which cause a student to develop his "own" ideas | | | | | |
| 6. knowing what individual students are doing | | | | | |

7. helping a student to evaluate his efforts

8. making use of the physical setting (room, building, etc.)

9. getting assistance from other resource people (teacher, parents, etc.)

10. speaking in a conversational tone in classroom

11. communicating with parents

12. getting students to help one another

| very low | low | ok | high | very high |
|---|---|---|---|---|

13. other _____

d) List those four skills (numbers) which you feel are most important for a teacher to develop in this kind of classroom (project).

____ ____ ____ ____

List those four skills (numbers) which you feel are least important for a teacher to develop in this kind of classroom.

____ ____ ____ ____

e) At this point, what is your level of satisfaction with the performance of students.

| very low | low | ok | high | very high |
|---|---|---|---|---|

f) Generally, "high achievers" before I changed the sytle of my classroom are now
(circle one)
   a) continuing at the same level
   b) reaching even greater heights
   c) dragging their feet

g) Generally,"low achievers" before I changed the style of my classroom are now
(circle one)
a) continuing at the same level
b) really trying to accomplish something
c) worse off than ever

h) Place the students in your class(es) on the following scale as to the % falling into each space.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| a total loss! | little response | a glimmer of hope | real possibilities | involved with good results | highly self-directed & motivated | | hard to believe! |

6. Place the students in your class on the following scales as to the % having each level of competency in a particular skill:

| | very low | low | ok | high | very high |
|---|---|---|---|---|---|
| 1. setting and refining goals | | | | | |
| 2. planning activities | | | | | |
| 3. locating and using resources | | | | | |
| 4. listening to others | | | | | |
| 5. seeking help from others | | | | | |
| 6. evaluating their own performance | | | | | |
| 7. making use of the physical setting | | | | | |
| 8. behaving in a constructive manner | | | | | |

9. using a variety of means to express themselves (writing, drawing, building, speaking, etc.)

| ' | ' | ' | ' | ' |
|---|---|---|---|---|
| very low | low | ok | high | very high |

10. making good use of time

| ' | ' | ' | ' | ' |
|---|---|---|---|---|
| very low | low | ok | high | very high |

11, other _____

8. What, specifically, have been the advantages and disadvantages in having two or more teachers in each school initiating this project.

| Advantages | Disadvantages |
|---|---|
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |

9. At this point, I would like to (circle one)
   a) discontinue this approach in my classroom
   b) continue this approach but in a reduced way
   c) continue in basically the same way
   d) expand this approach

10. What, specifically, are the most serious problems you now face in the further development of your classroom?

11. At this point, I feel the COD staff (circle one)
   a) has been very helpful to me
   b) has been helpful to me
   c) hasn't been of much help
   d) hasn't been of any help
   e) isn't really needed in my situation

12. I hope to achieve the following things as a result of this workshop:

a)_____

b)_____

c)_____

d)_____

e)_____

Project COD
52 Ash Street
New Bedford, Mass. 02740

# SELECTED CLASSROOM PROJECT

## Summary of Questionnaire #1 - An Assessment of Your Situation at This Point

(18 responses)

Q. 1. What were the most important expectations you had for this project at the start?

Responses: (Numerals in parentheses indicate number of responses)

a) To individualize teaching-learning (5)
b) To develop student skills, to focus on interests (3)
c) To make student responsible for own learning/ activities (3)
d) To try to meet school philosophy (2)
e) To provide students with opportunity for self direction (2)
f) To learn from one subject in order to broaden others (2)
g) To make learning more real and alive (2)
h) More informality (2)
i) To let student enjoy school (2)

The following were listed only once each:

To reduce teacher-student confrontation
To reduce imposition of teacher's value on students
To provide opportunity to fail and try again
To provide class time for student's own use
To develop student curiosity
To allow for group spirit growth
To learn without pressure
To use teacher as resource by student
Student will know themselves and each other
How does discipline change with different classroom
Student can learn without teacher direction
Teacher will stop being a policeman
To use community resources in classroom
To go and see other programs and classrooms
Clearinghouse for techniques
To help in implementing changes in classroom
To provide for a maximum of student achievement
To encourage student creativity
To try ideas of my own (teacher)
To get out of teacher's rut
To help student gain more scientific or everyday knowledge
To help develop real and personal contact with each student
To humanize classroom
To allow each student to reach learning potential

Q. 2. Which of these expectations have been most fully realized, which least realized?

Responses

a) Most fully realized:

- To see if kiddos can learn with minimum of teacher direction
- To observe how discipline is affected by different teaching methods
- To determine if kiddos can carry through on projects in which they are interested
- To create an interest in learning in those students who previously showed little interest
- To develop a stronger relationship between the students and myself
- Get students to initiate classroom learning experiences
- That the kids will develop responsibility for their own learning
- That the kids will become more involved with each other and aware of each other
- Individualized teaching
- The need to treat students as individuals and realize their own individual potentials
- To better open classrooms to all learning experiences
- Release time acceptance by administration
- The idea of an informal atmosphere and the help from the COD staff have been my most fully realized goals
- I certainly have reached individuals that I never would have done under the former system
- Students' creativity and "life"-wow!
- A spirit of cooperation between the students
- Aid in establishing environment where failure is not to be feared
- Change in teaching philosophy and classroom techniques
- I wanted the kids to begin relying on themselves for their education
- I wanted to stop disciplining all the time in simple behavioral problems
- A working relationship with students
- Happy attitude toward school

b) Least fully realized:

To improve the teaching and learning process with children
To develop a dynamic classroom
Develop a sense of responsibility in each student for his or her actions
That the kids will come to realize their abilities and limitations
Imposition of my values on students
The idea of coinciding with the philosophy of the school
To provide all students a maximum of achievement
Guideline
Children not taking proper advantage of program. Many abuse it.

I wanted to try to escape from books
The concept of reaching the slower students is still somewhat of a problem
Various methods of my own-ha!
Self-direction in the classroom is poor
Development of atmosphere where time for student is available
Develop ability in student to state and focus on area of interest
Availability of some definite plan for change
I wanted to bring the surrounding community into the kids education, including parents
A more useful scientific or everyday knowledge
Personal and collective responsibility

Q. 3. What were the most important reservations you had at the beginning of this project?

Responses: (Numerals in parentheses indicate number of responses)

a) Would students accept program? (9)
b) Would students suffer academically? (7)
c) Was teacher experienced enough? (6)
d) Could teacher "cope" with activities? (6)
e) Would students get out of hand? (4)
f) Would students do meaningful things? (4)
g) Physical limitations of room and facilities and materials (3)
h) Would other teachers cooperate? (3)
i) Can students really plan? (3)
j) Should teacher be in charge? (2)
k) Would parents accept program? (2)
l) Isn't a structured classroom needed? (2)
m) Would administrators really approve? (2)
n) Could progress be evaluated? (1)
o) Is textbook necessary? (1)
p) Noisy room might be bad (1)
q) Could students maintain interests? (1)
r) Not knowing what is happening all the time (1)
s) Students might be "spoiled" for other teachers (1)
t) Can slow students adapt? (1)
u) Would there be too much junk around? (1)

Q. 4. Which of these reservations have been justified by your experience in the last six weeks?

Responses: (Numerals in parentheses indicate number of responses)

a) Would students accept program? (3)
h) Would other teachers cooperate? (3)
g) Physical limitations of room and facilities and materials (2)
b) Would students suffer academically? (1)
f) Would students do meaningful things? (1)
i) Can students really plan? (1)
k) Would parents accept program? (1)

l) Isn't structured classroom needed? (1)
n) Could progress be evaluated? (1)
t) Can slow students adapt? (1)

Q. 5. What were the most significant positive results of this project that were unexpected?

Responses:

a) Student Responsibility
   1. That the kids actually worked on goals during their free time and these goals were set in math.
   2. Diversification of topics and student self control.
   3. The degree of responsibility that the kids have assummed was somewhat surprising.
   4. The students' attitude and behavior which has been excellent.
   5. The professionalism which the students have with their approach to this project.
   6. Assumption of responsibility and desire on the part of many students.

b) Student Interest
   1. The kids are beginning to find that books can be fun and interesting.
   2. The immediate easy-going feeling of the students. Unknown interests now realized.

c) Student development and happiness
   1. The tendency toward creativity in original writing.
   2. The students finally enjoying school and their behavior.
   3. Some children have really blossomed in this project. Becoming independent and interested - One dropout has decided to continue til June.
   4. The eagerness with which some children who were rather quiet, blossomed out.
   5. Some students who I least expected to make such tremendous gains have done a fantastic job.
   6. I am happy with what is going on in grade six social studies, and I think my students are.
   7. The way in which the group easily switched into a science project and did a much more effecient job job of it than a group not in the project.

d) Other
   Kiddos work in spurts-some days highly motivated, other days less so motivated.

Q. 6. What were the most significant negative results of this project that were unexpected?

Responses:

a) Students
   1. A few students who have been excellent achievers showed a lack of initiative in choosing their own a.g.'s.

2. That some of the children I considered highly creative could not make the transition, and became anti-school.
3. Inability of some students to select and execute projects.
4. The passivity and unapproachability of some of the students.
5. The inability (or lack of desire) of 2 students to accomplish anything on their own.
6. A few fourth grade boys are totally wiped-out. They cannot come up with anything and are even unable to think to ask me for help.
7. Absolute inability to see where a project might be carried on. Copy-catting of projects.
8. [Lack of] Responsibility and thoughtfulness of others.
9. Keeping the pupils interested in learning. It appeared that interest in a project lasts one week for most. Less for others.

b) Teachers
1. Lack of time when I could be available to students so that program would run smoother.
2. Excessive strain on teacher
3. I would say present reactions, but that doesn't fit so I'll say I am not satisfied with the structure of my room. It doesn't fit this style of learning (yet).
4. My inner feelings-being so mixed up myself. I thought I would be so secure in all situations in the classroom.
5. The negative attitude of some of the faculty members in regard to the program.
6. Traditional teacher vehemence.

c) Parents
1. The reaction of many parents and others who visited in connection with the school program.

Q. 7a. At this point, what is your overall level of satisfaction with your classroom in the project?

| Response: N= | 2 | 7 | 6 | 3 |
|---|---|---|---|---|
| very low | low | ok | high | very high |

Q. 7b. At this point, what is your level of satisfaction with your performance as a teacher in this project?

| Response: N= | 3 | 7 | 8 | |
|---|---|---|---|---|
| very low | low | ok | high | very high |

Q. 7c. Please assess the current level of your personal competence in each of the following teaching skills:

Response:

| Teaching Skills | very low | low | ok | high | very high |
|---|---|---|---|---|---|
| 1. helping a student identify a goal | | 4 | 10 | 4 | |
| 2. helping a student develop a useful plan | | 2 | 10 | 5 | 1 |
| 3. helping students locate resources | | 2 | 8 | 5 | 3 |
| 4. listening to students | | | 5 | 8 | 5 |
| 5. asking questions which cause a student to develop his "own" ideas | | 2 | 10 | 5 | 1 |
| 6. knowing what individual students are doing | 1 | | 5 | 7 | 5 |
| 7. helping a student to evaluate his efforts | | 2 | 10 | 6 | |
| 8. making use of the physical setting (room, building, etc.) | | 2 | 3 | 10 | 3 |
| 9. getting assistance from other resource people (teacher, parents, etc.) | 1 | 6 | 7 | 3 | 1 |
| 10. speaking in a conversationsl tone in classroom | | 1 | 8 | 7 | 2 |
| 11. communicating with parents | 2 | 3 | 5 | 8 | |
| 12. getting students to help one another | | 1 | 7 | 6 | 4 |

Q. 7d. List those four skills (numbers) which you feel are most important for a teacher to develop in this kind of classroom (project). List those four skills (numbers) which you feel are least important for a teacher to develop in this kind of classroom.

Responses: (N=number of choices for each skill)

| Most Important | Teacher Skills | Least Important |
|---|---|---|
| N= 13 | 1. helping a student identify a goal | N= ___ |
| 9 | 2. helping a student develop a useful plan | 1 |
| 3 | 3. helping students locate resources | 2 |
| 4 | 4. listening to students | - |
| 10 | 5. asking questions which cause a student to develop his "own" ideas | - |
| 2 | 6. knowing what individual students are doing | 2 |
| 12 | 7. helping a student to evaluate his efforts | - |
| 1 | 8. making use of the physical setting (room, building, etc.) | 3 |
| 3 | 9. getting assistance from other resource people (teacher, parents, etc.) | 2 |
| 2 | 10. speaking in a conversational tone in classroom | 5 |
| - | 11. communicating with parents | 9 |
| 5 | 12. getting students to help one another | 3 |

Q. 7e. At this point, what is your level of satisfaction with the performance of students.

Responses: (These are shown according to the way in which each teacher responded to question 7b-satisfaction with self as teacher.

| Teacher satisfaction with own role | Teacher satisfaction with students' role: very low | low | ok | high | very high |
|---|---|---|---|---|---|
| very low | | | | | |
| low (3) | | 2 | 1 | | |
| ok (7) | | | 4 | 3 | |
| high (8)* | | | 1 | 6 | |
| very high | | | | | |

* (1 no answer)

Q. 7f. Generally, "high achievers" before I changed the style of my classroom are now (circle one)

Responses: (two no answer)

a) continuing at the same level 6
b) reaching even greater heights 6
c) dragging their feet 4

Q. 7g. Generally, "low achievers" before I changed the style of my classroom are now (circle one)

Responses: (one no answer)

a) continuing at the same level 3
b) really trying to accomplish something 12
c) worse off than ever 2

Q. 7h. Place the students in your class(es) on the following scale as to the % falling into each space.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| a total loss! | little response | a glimmer of hope | real possibilities | involved with good results | highly self-directed & motivated | | hard to believe! |

Responses: (4 no answers)

1. Ten teachers out of fourteen responding ranked 40% or more of their students as falling into the categories above 4 on the scale.

2. Three teachers out of fourteen responding ranked 40% or more of their students as falling into the categories below 3 on the scale.

Q. 8. What, specifically, have been the advantages and disadvantages in having two or more teachers in each school initiating this project.

Responses: (numerals in parentheses indicate number of responses)

a) Advantages
   1. Transfer (sharing) of ideas (12)
   2. Able to commiserate! (10)
   3. High cooperation (5)
   4. Comparisons of observations (evaluation) (5)
   5. Sharing workload (2)
   6. Students have variety of teachers (2)
   7. Maximum use of space (1)
   8. Flexibility of time (1)

b) Disadvantages
   1. None (12)
   2. Not available at same times, or not close in building (3)
   3. Compare classes (1)
   4. Personal clashes (1)
   5. Other teachers are hostile (1)
   6. Personal flexibility is reduced (1)

Q. 9. At this point, I would like to (circle one)

| | Response: (1 no ans. |
|---|---|
| a) discontinue this approach in my classroom | 0 |
| b) continue this approach but in a reduced way | 1 |
| c) continue in basically the same way | 3 |
| d) expand this approach | 13 |

Q. 10. What, specifically, are the most serious problems you now face in the further development of your classroom?

Responses: (5 no answers)-(Numerals in parentheses indicate # of responses)

a) Selecting more challenging projects (4)
b) Motivating students (2)
c) Getting students to use their time better (2)
d) Getting away from spending so much time correcting work (1)
e) Building confidence in some students (1)
f) Identification of students' real abilities (1)
g) Planning for better student-teacher communication (1)
h) Keeping track of individual progress (1)
i) Teacher stamina (1)

Q. 11. At this point, I feel the COD staff (circle one)

| | Responses: |
|---|---|
| a) has been very helpful to me | 8 |
| b) has been helpful to me | 9 |
| c) hasn't been of much help | 1 |
| d) hasn't been of any help | 0 |
| e) isn't really needed in my situation | 0 |

Q. 12. I hope to achieve the following things as a result of this workshop:

Responses: (numerals in parentheses indicate number of responses)

a) Exchange of ideas (9)
b) New ideas for students activities, more involvement (5)
c) Help in activity evaluation (3)
d) Keep in touch with other SCP teachers (2)
e) Set new goals for own involvement (2)
f) New ideas for teacher activities (1)
g) Help with student goal setting (1)
h) Stimulate creativity (1)
i) Compare feelings (about project) with other teachers (1)
j) Share successes with others (1)
k) Recharge batteries (1)

Appendix C

Workshop on Symbolic Arts
Dr. Jack Manual
Boston University

Presented as part of Workshop for
Selected Classroom Project Teachers
February 12, 13, 14, 1971

SELECTED CLASSROOMS STUDY

PROJECT COD WORKSHOP

SOUTH DARTMOUTH, MASSACHUSETTS

SATURDAY, FEBRUARY 13, 1971

DIRECTOR: Dr. Jack Manuel, Boston University, School of Education

ASSISTANT: Natalie Norton, Boston University, School of Education

PROGRAM

MORNING SESSION -- 9:00 - 12:00

I. THE SYMBOLIC ARTS OF HUMANISM

A. Symbolic Language Art Systems --The Technology of Humanism

The Symbolic Language Art Systems as partial and unique views of meaning; Meaning is not the exclusive domain of any single language system. The miracle of the symbol

1. Film: Great Expectations
2. Slide Presentation: "Perception and the Technology of Humanism"
3. Film: Face Junk
4. Slide-Tape: The Perceptual Inadequacies of the Communicative Symbolic Art Language Systems -- The Isolation of the Human in his Subjective World.

B. The Aesthetics of Humanism

The Psychology of Perception as it relates to Philosophy of Experience -- the Nine Humanistic Languages.

II. SYMBOLIC ARTS --- DEMONSTRATION -- APPLICATION

The Translation of Meaning into Various Symbolic Language Art Systems -- The Experience of Different Levels of Meaning.

A. Experiential Source -- Slide Tape: "Let There Always Be A Me"

1. Translation of the preceding "meaning" into the following symbolic language art systems:

   a. word
   b. painting
   c. sound-piece
   d. poetry
   e. movement
   f. dramatizations

2. Emphasis on the following Linguistic Dimensions:

   a. texture
   b. contrast
   c. rhythm
   d. color
   e. harmony
   f. form
   g. imagery
   h. synonyms, antonyms, homonyms
   i. metaphors

B. Experiential Source -- Slide-Tape "Cortez"

The Identigrative Symbolic Arts Approach to Social Studies:

1. Translation of the "meaning" of Cortez into the following Symbolic language art systems:

   a. social
   b. economic
   c. political
   d. literary
   e. artistic
   f. musical
   g. philosophic
   h. scientific
   i. religious

LUNCH -- 12:00 - 1:00

AFTERNOON SESSION -- 1:00 - 5:00

III. Energy and Humanism

A. The Sense and Shape of Time

The Mystery of Time

B. The Mystery of Line and Energy

"Where Do You Draw Your Line"

C. The Shaping of Time and Space -- Energy as Emotion

"A Multi-Media Assault on Time-Space Meaning"

1. ACTIVITY: A multi-media approach to meaning via the media of:

(SYMBOLIC ARTIFACTS)

| | |
|---|---|
| a. word | d. sound pieces |
| b. painting | e. movement |
| c. poetry | f. dramatization |

(SYMBOLIC LANGUAGE ART SYSTEMS)

| | | |
|---|---|---|
| g. Social | j. Literary | m. Religious |
| h. Economic | k. Artistic | n. Scientific |
| i. Political | l. Musical | o. Philosophic |

D. IDENTIGRATION: THE RELATING TO MEANING THROUGH ONE'S INTEREST

1. Interest as Forms Through Which One Can Relate to Meaning:

| | | |
|---|---|---|
| a. Light | e. Movement | i. Time |
| b. Sound | f. Form or media | j. Space |
| c. Line | g. Rhythm | k. Color |
| d. Texture | h. Contrast | l. Harmony |

2. ACTIVITY: FILM-MAKING -- A MOTIVATING AGENT FOR IDENTIGRATIVE CONCERNS.

a. The use of film-making to identigrate interest areas or forms with language art, social studies, math, science, physical education, art and music concerns.

Appendix D

1. Student Questionnaire

2. Data Collected From Student Questionnaire, Class Resporses By Question

Project COD
52 Ash Street
New Bedford, Mass. 02740

# SELECTED CLASSROOM PROJECT

Class: _____
(list homeroom teacher)

Your class has been part of a special program. You have been able to do your classwork differently. We need to know what you think about this program. Please help us by marking your answer with an X on the scale to the right of each question.

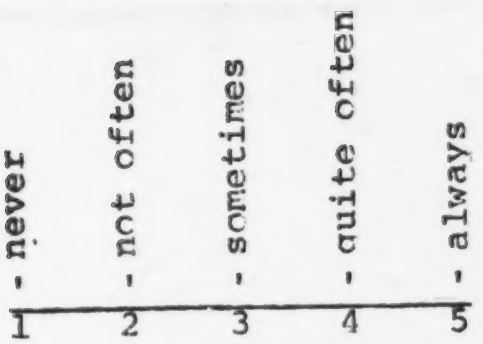
Example:
*Do you like school?*

| 1 - never | 2 - not often | 3 - sometimes | 4 - quite often | 5 - always |
|---|---|---|---|---|
| | | | | X |

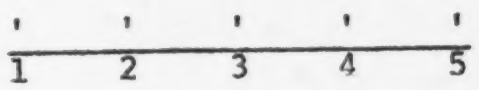
| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. Do you enjoy doing your projects? | | | | | |
| 2. Do you ask the teacher for help when you are stuck? | | | | | |
| 3. Do you "think up" your own projects? | | | | | |
| 4. Do you help other kids if they have trouble? | | | | | |
| 5. Can you work just as well when the teacher leaves the room? | | | | | |
| 6. When you are working with a partner or group can you really depend on others to do their own share? | | | | | |
| 7. Can you tell the teacher and others in your class how you really feel about your work? | | | | | |

- never - not often - sometimes - quite often - always

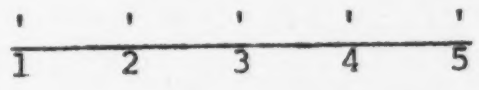
8. Can you "be yourself" (feel comfortable) in class?



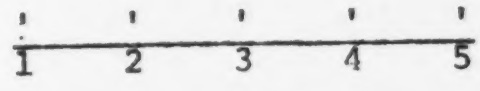

9. Can you usually do your project the way you want to?



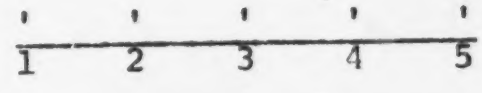

10. Do you like to get letter grades (A, B, C, D,) on your projects?



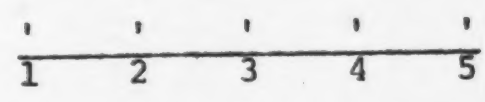

11. Do you feel the teacher is interested in what you are doing?



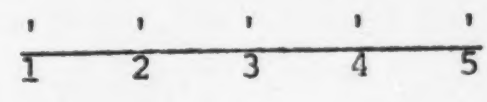

12. Do you pick projects that you have to work hard on?



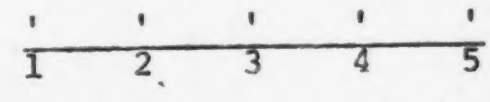

13. For your projects, do you feel that you can make plans so that you can follow them?



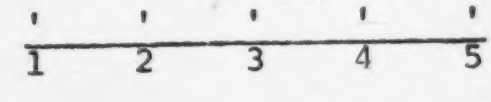

14. Do you ask other students for help before you go to the teacher?



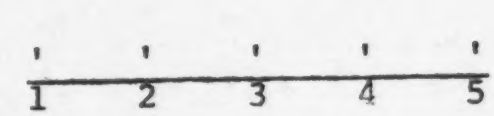

15. Do you pick projects you can really do?



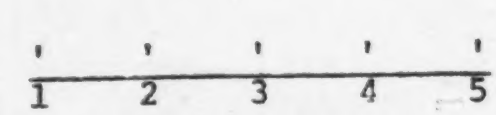

16. If you need help and can't get it right away, do you do other things?




17. Do you bring materials, pictures, things, etc. of your own from home to use with your project or your friends projects?




18. Can you find a good place to work on your project?



| | 1 - never | 2 - not often | 3 - sometimes | 4 - quite often | 5 - always |
|---|---|---|---|---|---|
| 19. Do you pick your projects from a list the teacher gives you? | | | | | |
| 20. Do you care about how other kids are doing on their projects? | | | | | |
| 21. Do you get your projects done in the amount of time you planned on? | | | | | |
| 22. Do other kids bother you while you are working on your project? | | | | | |
| 23. For your projects do you use things such as: a) chemicals, b) construction materials (cardboard, paint, paper, wood, paste, clay, scissors), c) tools, d) "junk" (buttons, cloth, jars, tin cans, string) etc.? | | | | | |
| 24. Do other kids come to you for help. | | | | | |
| 25. Do you change things around in the room in order to do your project? | | | | | |
| 26. Do you work on your projects outside of school (at home)? | | | | | |
| 27. Do your parents think that this is a good way to do schoolwork? | | | | | |
| 28. Do you think that this is a better way of doing your schoolwork than the way you used to do it? | | | | | |

PLEASE LOOK BACK TO BE SURE YOU HAVE MARKED EVERY SCALE.

Thanks for your help.

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

**Question 1**

**Scale**

Do you enjoy doing your projects?

1 -never 2 -not often 3 -some-times 4 -quite often 5 -always

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | | | 20.0 | 44.0 | 36.0 |
| A5b | 10.7 | | 28.6 | 39.3 | 21.4 |
| A5c | | | 26.9 | 11.5 | 61.5 |
| B7E | 4.8 | | 23.8 | 42.9 | 28.6 |
| B7F | | 5.9 | 47.1 | 11.8 | 35.3 |
| B8 | | 3.8 | 46.2 | 30.8 | 19.2 |
| C4a | 3.1 | 3.1 | 9.4 | 21.9 | 62.5 |
| C4b | 3.1 | | 3.1 | 31.3 | 62.5 |
| C4c | | 3.1 | 6.3 | 18.8 | 71.9 |
| D7a | | | 19.2 | 46.2 | 34.6 |
| D7b | | | 26.9 | 30.8 | 42.3 |
| D7c | | 3.8 | 19.2 | 38.5 | 38.5 |
| D8a | | 10.8 | 32.4 | 37.8 | 18.9 |
| D8b | | 8.3 | 50.0 | 25.0 | 16.7 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 5.0 | 5.0 | 50.0 | | 40.0 |
| E5 | 8.3 | | 41.7 | | 50.0 |
| F5 | 4.5 | | 13.6 | 18.2 | 63.6 |
| F6a | | | 22.2 | 25.9 | 51.8 |
| F6b | | | 4.3 | 56.5 | 39.1 |
| G5 | | | 26.1 | 30.4 | 43.5 |
| G6 | | | 11.1 | 55.6 | 33.3 |
| G7 | | | 15.0 | 55.0 | 30.0 |
| G8 | | | 13.8 | 62.1 | 24.1 |
| H6 | 2.9 | | 22.8 | 34.3 | 40.0 |
| H7 | | | 16.7 | 41.7 | 41.7 |
| H8 | | 8.8 | 29.4 | 55.9 | 5.9 |
| J7 | | | 9.5 | 69.1 | 21.4 |
| J8a | | 6.3 | 50.0 | 34.4 | 9.4 |
| J8b | | | 24.2 | 57.6 | 18.2 |

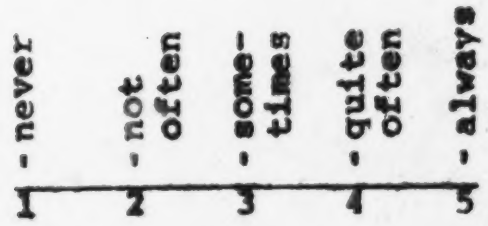
## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

**Question 2**

Do you ask the teacher for help when you are stuck?

**Scale**




| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | | 32.0 | 48.0 | 16.0 | 4.0 |
| A5b | | 7.1 | 46.4 | 25.0 | 21.5 |
| A5c | | 11.5 | 46.2 | 15.4 | 26.9 |
| B7E | 14.3 | 14.3 | 52.4 | 9.5 | 9.5 |
| B7F | 5.9 | 29.4 | 47.1 | | 17.7 |
| B8 | 7.4 | 3.7 | 51.8 | 11.1 | 25.9 |
| C4a | 9.4 | 15.6 | 50.0 | 9.4 | 15.6 |
| C4b | 3.1 | 9.4 | 50.0 | 21.9 | 15.6 |
| C4c | | 6.3 | 43.8 | 31.3 | 18.8 |
| D7a | | 7.7 | 57.7 | 23.1 | 11.5 |
| D7b | | 11.5 | 50.0 | 15.4 | 23.1 |
| D7c | 3.8 | 7.7 | 50.0 | 19.2 | 19.2 |
| D8a | | 21.6 | 46.0 | 18.9 | 13.5 |
| D8b | 11.1 | 19.4 | 33.3 | 25.0 | 11.1 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 5.0 | 10.0 | 50.0 | 5.0 | 30.0 |
| E5 | | | 38.5 | 7.7 | 53.8 |
| F5 | | | 50.0 | 31.8 | 18.2 |
| F6a | | 14.8 | 48.1 | 18.5 | 18.5 |
| F6b | | 4.3 | 52.2 | 26.1 | 17.4 |
| G5 | | 13.0 | 34.8 | 26.1 | 26.1 |
| G6 | | | 33.3 | 38.9 | 27.8 |
| G7 | | 10.5 | 36.8 | 42.1 | 10.5 |
| G8 | | 6.9 | 51.7 | 24.1 | 17.2 |
| H6 | | 2.8 | 72.2 | 11.1 | 13.9 |
| H7 | 2.8 | 11.1 | 50.0 | 19.4 | 16.7 |
| H8 | | 8.8 | 47.0 | 29.4 | 14.7 |
| J7 | 2.4 | 7.1 | 52.4 | 19.0 | 19.0 |
| J8a | | 15.6 | 43.8 | 28.1 | 12.5 |
| J8b | | 18.2 | 36.4 | 24.2 | 21.2 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

**Question 3**

Do you "think up" your own projects?

**Scale**

1 . never
2 . not often
3 . some-times
4 . quite often
5 . always

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 16.0 | 44.0 | 20.0 | 8.0 | 12.0 |
| A5b | 21.4 | 10.7 | 25.0 | 32.1 | 10.7 |
| A5c | 7.7 | 23.1 | 57.7 | 7.7 | 3.8 |
| B7E | | 9.5 | 38.1 | 19.0 | 33.3 |
| B7F | 5.9 | 5.9 | 47.1 | 17.7 | 23.5 |
| B8 | | 11.1 | 40.7 | 37.0 | 11.1 |
| C4a | | 9.4 | 37.5 | 34.4 | 18.8 |
| C4b | 3.1 | 6.3 | 43.8 | 34.4 | 12.5 |
| C4c | | 6.3 | 28.1 | 12.5 | 53.1 |
| D7a | 3.8 | | 7.7 | 26.9 | 61.5 |
| D7b | | | 7.7 | 34.6 | 57.7 |
| D7c | | | 26.9 | 34.6 | 38.5 |
| D8a | | | 16.2 | 37.8 | 46.0 |
| D8b | | 5.6 | 16.7 | 36.1 | 41.7 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | | 5.0 | 55.0 | 10.0 | 30.0 |
| E5 | 41.7 | | 33.3 | 8.3 | 16.7 |
| F5 | | | 31.8 | 18.2 | 50.0 |
| F6a | | 7.7 | 19.2 | 19.2 | 53.8 |
| F6b | 4.3 | | 26.1 | 39.1 | 30.4 |
| G5 | 4.3 | 8.7 | 39.1 | 30.4 | 17.4 |
| G6 | | | 33.3 | 50.0 | 16.7 |
| G7 | | 5.0 | 50.0 | 25.0 | 20.0 |
| G8 | | 6.9 | 31.0 | 44.8 | 17.2 |
| H6 | | 2.8 | 30.5 | 33.3 | 33.3 |
| H7 | | | 27.8 | 33.3 | 38.9 |
| H8 | | 2.9 | 47.1 | 32.4 | 17.6 |
| J7 | | 2.4 | 21.4 | 61.9 | 14.3 |
| J8a | | 3.1 | 37.5 | 34.4 | 25.0 |
| J8b | | 3.0 | 27.3 | 36.4 | 33.3 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

**Question 4**

Do you help other kids if they have trouble?

**Scale**

1 - never
2 - not often
3 - some-times
4 - quite often
5 - always

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 4.0 | 40.0 | 28.0 | 24.0 |
| A5b | 3.6 | 10.7 | 46.4 | 25.0 | 14.3 |
| A5c | 3.8 | 23.1 | 53.8 | 15.4 | 3.8 |
| B7E | 9.5 | | 23.8 | 9.5 | 57.1 |
| B7F | | 17.7 | 52.9 | 23.5 | 5.9 |
| B8 | 3.7 | 22.2 | 48.1 | 18.5 | 7.4 |
| C4a | | 9.4 | 21.9 | 18.8 | 50.0 |
| C4b | | 9.4 | 46.9 | 21.9 | 21.9 |
| C4c | 9.3 | 6.2 | 43.8 | 25.0 | 15.6 |
| D7a | | 19.2 | 53.8 | 19.2 | 7.7 |
| D7b | | 19.2 | 15.4 | 65.4 | |
| D7c | 3.8 | 19.2 | 50.0 | 26.9 | |
| D8a | 2.7 | 16.2 | 43.2 | 24.3 | 13.5 |
| D8b | 13.9 | 19.4 | 41.7 | 16.6 | 8.3 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 30.0 | 15.0 | 40.0 | 15.0 | |
| E5 | | 15.4 | 23.1 | 7.7 | 53.8 |
| F5 | | | 45.5 | 31.8 | 22.7 |
| F6a | | | 63.0 | 22.2 | 14.8 |
| F6b | | | 52.2 | 39.1 | 8.7 |
| G5 | 4.3 | 13.0 | 26.1 | 13.0 | 43.5 |
| G6 | | 16.7 | 50.0 | 11.1 | 22.2 |
| G7 | | 10.0 | 40.0 | 40.0 | 10.0 |
| G8 | 3.4 | 6.9 | 58.6 | 17.2 | 13.8 |
| H6 | | 25.0 | 55.6 | 8.3 | 11.1 |
| H7 | | 11.1 | 44.4 | 22.2 | 22.2 |
| H8 | 2.9 | 8.8 | 44.1 | 32.4 | 11.8 |
| J7 | | | 31.0 | 47.6 | 21.4 |
| J8a | 9.4 | 15.6 | 46.9 | 15.6 | 12.5 |
| J8b | | 9.1 | 45.5 | 33.3 | 12.1 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

**Question 5**

Can you work just as well when the teacher leaves the room?

**Scale**

1 - never
2 - not often
3 - some-times
4 - quite often
5 - always

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 8.0 | 4.0 | 28.0 | 40.0 | 20.0 |
| A5b | | 7.1 | 53.6 | 17.9 | 21.4 |
| A5c | 3.8 | 15.4 | 34.6 | 26.9 | 19.2 |
| B7E | 9.5 | 9.5 | 23.8 | 14.3 | 42.9 |
| B7F | 12.5 | 6.3 | 18.8 | 31.3 | 31.3 |
| B8 | 11.1 | 33.3 | 22.2 | 22.2 | 11.1 |
| C4a | 9.4 | 15.6 | 34.4 | 18.8 | 21.9 |
| C4b | | 6.3 | 12.5 | 37.5 | 43.8 |
| C4c | | 3.1 | 28.1 | 18.8 | 50.0 |
| D7a | | 3.8 | 23.1 | 38.5 | 34.6 |
| D7b | | 7.7 | 15.4 | 38.5 | 38.5 |
| D7c | | | 19.2 | 57.7 | 23.1 |
| D8a | 8.1 | 10.8 | 35.1 | 10.8 | 35.1 |
| D8b | 8.3 | 8.3 | 36.1 | 33.3 | 13.9 |
| | | | | | |

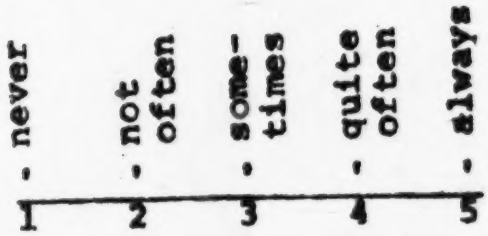
| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 5.0 | 5.0 | 20.0 | 10.0 | 60.0 |
| E5 | | 7.7 | 61.5 | | 30.8 |
| F5 | | | 18.2 | 40.9 | 40.9 |
| F6a | 14.8 | 14.8 | 22.2 | 14.8 | 33.3 |
| F6b | | 17.4 | 13.0 | 30.4 | 39.1 |
| G5 | 8.7 | | 43.5 | 17.4 | 30.4 |
| G6 | | | 11.1 | 11.1 | 77.8 |
| G7 | | | 5.0 | 50.0 | 45.0 |
| G8 | | 3.4 | 20.7 | 27.6 | 48.3 |
| H6 | 8.3 | 8.3 | 25.0 | 11.1 | 47.2 |
| H7 | | 8.3 | 25.0 | 27.8 | 38.9 |
| H8 | | 8.8 | 50.0 | 32.4 | 8.8 |
| J7 | | 2.4 | 19.0 | 35.7 | 42.9 |
| J8a | | 3.1 | 37.5 | 37.5 | 21.9 |
| J8b | | | 36.4 | 33.3 | 30.3 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

### Question 6

When you are working with a partner or group can you really depend on others to do their own share?

**Scale**




| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 16.0 | 8.0 | 52.0 | 12.0 | 12.0 |
| A5b | | 3.6 | 42.9 | 35.7 | 17.9 |
| A5c | 3.8 | | 26.9 | 23.1 | 46.2 |
| B7E | 9.5 | 9.5 | 47.6 | 14.3 | 19.0 |
| B7F | | 12.5 | 31.3 | 25.0 | 31.3 |
| B8 | 7.4 | 25.9 | 40.7 | 22.2 | 3.8 |
| C4a | 3.3 | 18.8 | 34.4 | 18.8 | 25.0 |
| C4b | | 3.1 | 12.5 | 31.3 | 53.1 |
| C4c | | 6.3 | 21.9 | 31.3 | 40.6 |
| D7a | 7.7 | 3.8 | 42.3 | 23.1 | 23.1 |
| D7b | 3.8 | 15.4 | 34.6 | 38.5 | 7.7 |
| D7c | 7.7 | 23.1 | 34.6 | 26.9 | 7.7 |
| D8a | 8.1 | 21.6 | 24.3 | 24.3 | 21.6 |
| D8b | 11.1 | 25.0 | 30.5 | 22.2 | 11.1 |
| | | | | | |

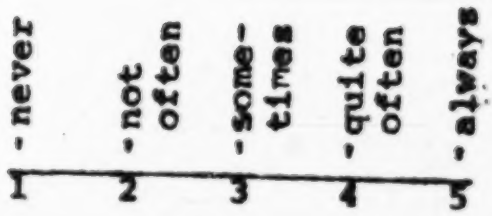
| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 15.0 | 25.0 | 20.0 | 30.0 |
| E5 | | 15.4 | 53.8 | | 30.8 |
| F5 | 9.1 | 4.5 | 40.9 | 27.3 | 18.2 |
| F6a | 14.8 | 37.0 | 25.9 | 7.4 | 14.8 |
| F6b | 4.3 | 30.4 | 30.4 | 21.7 | 13.0 |
| G5 | 4.3 | 17.4 | 34.8 | 13.0 | 30.4 |
| G6 | 11.1 | 11.1 | 11.1 | 22.2 | 44.4 |
| G7 | | 10.0 | 20.0 | 55.0 | 15.0 |
| G8 | | | 31.0 | 48.3 | 20.7 |
| H6 | 11.4 | 11.4 | 25.7 | 17.1 | 34.3 |
| H7 | 2.8 | 11.1 | 36.1 | 16.7 | 33.3 |
| H8 | 3.0 | 21.2 | 31.2 | 18.2 | 27.2 |
| J7 | | | 34.1 | 41.5 | 24.4 |
| J8a | | 6.3 | 37.5 | 37.5 | 18.8 |
| J8b | 3.0 | 3.0 | 42.4 | 30.3 | 21.2 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

Question 7

Can you tell the teacher and others in your class how you really feel about your work?

Scale




| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 20.0 | 28.0 | 28.0 | 8.0 | 16.0 |
| A5b | 7.1 | 35.7 | 49.9 | 3.5 | 3.5 |
| A5c | 34.6 | 3.8 | 30.7 | 23.0 | 7.6 |
| B7E | 14.2 | 23.8 | 42.8 | 9.5 | 9.5 |
| B7F | | 12.5 | 31.2 | 25.0 | 31.2 |
| B8 | 22.2 | 11.1 | 25.9 | 29.6 | 11.1 |
| C4a | 9.3 | 9.3 | 18.7 | 9.3 | 53.1 |
| C4b | 3.1 | | 18.7 | 25.0 | 53.1 |
| C4c | 15.6 | 12.5 | 25.0 | 25.0 | 21.8 |
| D7a | | 3.8 | 42.3 | 19.2 | 34.6 |
| D7b | 3.8 | 7.6 | 23.0 | 38.4 | 26.9 |
| D7c | 11.5 | 11.5 | 23.0 | 46.1 | 7.6 |
| D8a | 8.1 | 21.6 | 18.9 | 18.9 | 32.4 |
| D8b | 11.1 | 13.8 | 52.7 | 8.3 | 13.8 |
| | | | | | |

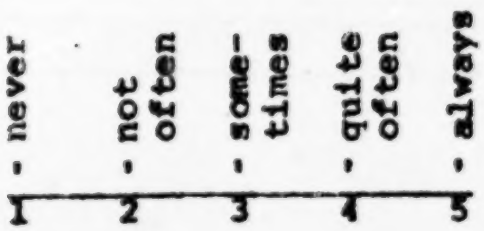
| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 40.0 | 5.0 | 30.0 | 5.0 | 20.0 |
| E5 | 53.8 | | 15.3 | 7.6 | 23.0 |
| F5 | 9.0 | 22.7 | 18.1 | 27.2 | 22.7 |
| F6a | 25.9 | 25.9 | 22.2 | 14.8 | 11.1 |
| F6b | 4.3 | 34.8 | 17.4 | 26.1 | 17.4 |
| G5 | 4.3 | 13.0 | 21.7 | 34.7 | 26.0 |
| G6 | | 11.1 | 38.8 | 22.2 | 27.7 |
| G7 | 10.0 | 5.0 | 40.0 | 20.0 | 25.0 |
| G8 | 3.4 | 10.3 | 44.8 | 27.5 | 13.7 |
| H6 | 8.3 | 22.2 | 22.2 | 16.6 | 30.5 |
| H7 | 5.5 | 16.6 | 22.2 | 27.7 | 27.7 |
| H8 | 2.9 | 11.7 | 17.6 | 29.4 | 38.2 |
| J7 | | 4.7 | 35.7 | 38.0 | 21.4 |
| J8a | 3.1 | 15.6 | 34.3 | 21.8 | 25.0 |
| J8b | 3.0 | 21.2 | 39.3 | 27.2 | 9.0 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

**Question 8**

**Can you "be yourself" (feel comfortable) in class?**

**Scale**




| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 12.0 | 24.0 | 36.0 | 24.0 |
| A5b | | | 35.7 | 35.7 | 28.5 |
| A5c | | 3.8 | 30.7 | 7.6 | 57.6 |
| B7E | 4.7 | | 42.8 | 23.8 | 28.5 |
| B7F | 5.8 | 11.7 | 35.2 | 17.6 | 29.4 |
| B8 | 11.1 | 11.1 | 44.4 | 7.4 | 25.9 |
| C4a | 9.3 | 3.1 | 12.5 | 25.0 | 50.0 |
| C4b | 3.1 | | 15.6 | 12.5 | 68.7 |
| C4c | 9.6 | 3.2 | 22.5 | 32.2 | 32.2 |
| D7a | | 7.6 | 15.3 | 42.3 | 34.6 |
| D7b | | 3.8 | 3.8 | 46.1 | 46.1 |
| D7c | | 11.5 | 23.0 | 34.6 | 30.7 |
| D8a | 10.8 | 5.4 | 21.6 | 29.7 | 32.4 |
| D8b | 5.5 | 16.6 | 30.5 | 30.5 | 16.6 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 21.0 | 5.2 | 36.8 | 5.2 | 31.5 |
| E5 | 53.8 | | 7.6 | 23.0 | 15.2 |
| F5 | 4.5 | 4.5 | 13.6 | 45.4 | 31.8 |
| F6a | 3.7 | 22.2 | 7.4 | 25.9 | 40.7 |
| F6b | | 13.0 | 43.5 | 26.1 | 17.4 |
| G5 | 4.3 | 17.3 | 21.7 | 17.3 | 39.1 |
| G6 | | | 16.6 | 16.6 | 66.6 |
| G7 | | 5.0 | 5.0 | 45.0 | 45.0 |
| G8 | | 3.4 | 13.7 | 44.8 | 37.9 |
| H6 | 2.7 | 22.2 | 13.8 | 24.9 | 36.1 |
| H7 | 2.7 | 2.7 | 22.2 | | 72.2 |
| H8 | | 3.0 | 27.2 | 30.3 | 39.3 |
| J7 | | 2.3 | 9.5 | 38.0 | 50.0 |
| J8a | 6.2 | 12.5 | 9.3 | 31.2 | 40.6 |
| J8b | | 3.0 | 24.2 | 30.3 | 42.4 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

Question 9

Can you usually do your project the way you want to?

Scale

- never
- not often
- some-times
- quite often
- always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 4.0 | 44.0 | 40.0 | 8.0 |
| A5b | 3.5 | 7.1 | 46.4 | 35.7 | 7.1 |
| A5c | | 19.2 | 38.4 | 19.2 | 23.0 |
| B7E | | 33.3 | 28.5 | 23.8 | 14.2 |
| B7F | 5.8 | 11.7 | 35.2 | 17.6 | 29.4 |
| B8 | 3.7 | 3.7 | 40.7 | 33.3 | 18.5 |
| C4a | 3.1 | 6.2 | 25.0 | 18.7 | 46.8 |
| C4b | | 3.1 | 28.1 | 53.1 | 15.6 |
| C4c | | | 34.3 | 31.2 | 34.3 |
| D7a | | | 11.5 | 69.2 | 19.2 |
| D7b | | | 26.9 | 34.6 | 38.4 |
| D7c | | 3.8 | 30.7 | 46.1 | 19.2 |
| D8a | 8.1 | 27.0 | 24.3 | 16.2 | 24.3 |
| D8b | 5.5 | 16.6 | 27.7 | 36.1 | 13.8 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 20.0 | 25.0 | 15.0 | 30.0 |
| E5 | 38.4 | | 23.0 | | 38.4 |
| F5 | | 4.5 | 22.7 | 59.0 | 13.6 |
| F6a | | 11.1 | 37.0 | 22.2 | 29.6 |
| F6b | 4.3 | | 17.4 | 47.8 | 30.4 |
| G5 | | 4.3 | 52.1 | 17.3 | 26.0 |
| G6 | | | 11.1 | 61.1 | 27.7 |
| G7 | | 10.0 | 25.0 | 60.0 | 5.0 |
| G8 | | | 6.8 | 58.6 | 34.4 |
| H6 | | 11.1 | 27.7 | 30.5 | 30.5 |
| H7 | | 5.5 | 30.5 | 36.1 | 27.7 |
| H8 | | | 41.1 | 35.2 | 23.5 |
| J7 | | 2.3 | 23.8 | 52.3 | 21.4 |
| J8a | 6.2 | 3.1 | 28.1 | 53.1 | 9.3 |
| J8b | | 6.0 | 36.3 | 45.4 | 12.1 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

Question 10

Do you like to get letter grades (A, B, C, D) on your projects?

Scale

- never
- not often
- some-times
- quite often
- always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 12.0 | 4.0 | 24.0 | 16.0 | 44.0 |
| A5b | 14.2 | 7.1 | 42.8 | | 35.7 |
| A5c | 23.0 | 3.8 | 26.9 | 7.6 | 38.4 |
| B7E | 14.2 | 9.5 | 9.5 | | 66.6 |
| B7F | 23.5 | 11.7 | 17.6 | 5.8 | 41.1 |
| B8 | 14.8 | 7.4 | 22.2 | 3.7 | 51.8 |
| C4a | 31.2 | 9.3 | 9.3 | 6.2 | 43.7 |
| C4b | 53.1 | 12.5 | 6.2 | 9.3 | 18.7 |
| C4c | 9.3 | 3.1 | 18.7 | 3.1 | 65.6 |
| D7a | 46.. | 7.6 | 19.2 | 3.8 | 23.0 |
| D7b | 42 3 | 26.9 | 19.2 | 11.5 | |
| D7c | 346 | 23.0 | 23.0 | 7.6 | 11.5 |
| D8a | 2.7 | | 16.2 | 16.2 | 37.8 |
| D8b | .6 | 8.3 | 22.2 | 11.1 | 16.6 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 5.0 | 5.0 | 5.0 | 75.0 |
| E5 | | | 15.3 | | 84.6 |
| F5 | 4.5 | | 22.7 | 9.0 | 63.6 |
| F6a | | 3.7 | 11.1 | 18.5 | 66.6 |
| F6b | 4.3 | 4.3 | 8.7 | 13.0 | 69.7 |
| G5 | 13.0 | | 17.3 | | 69.5 |
| G6 | 5.5 | 11.1 | 5.5 | 16.6 | 61.1 |
| G7 | 15.0 | | 10.0 | 30.0 | 45.0 |
| G8 | 3.4 | 6.8 | 20.6 | 17.2 | 51.7 |
| H6 | | 22.2 | 24.9 | 8.3 | 44.4 |
| H7 | 8.3 | 5.5 | 11.1 | 11.1 | 63.8 |
| H8 | 11.7 | | 23.5 | 11.7 | 52.9 |
| J7 | 4.7 | 4.7 | 23.8 | | 66.6 |
| J8a | 18.7 | 6.2 | 12.5 | 18.7 | 43.7 |
| J8b | 12.1 | 12.1 | 24.2 | 12.1 | 39.3 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

### Question 11

Do you feel the teacher is interested in what you are doing?

Scale

- never
- not often
- some-times
- quite often
- always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 8.0 | 20.0 | 20.0 | 48.0 |
| A5b | | | 39.2 | 28.5 | 32.1 |
| A5c | 7.6 | | 30.7 | 19.2 | 42.3 |
| B7E | 4.7 | 14.2 | 23.8 | 23.8 | 33.3 |
| B7F | 11.7 | 5.8 | 23.5 | 29.4 | 29.4 |
| B8 | 3.7 | 7.4 | 33.3 | 11.1 | 44.4 |
| C4a | | 3.1 | 37.5 | 15.6 | 43.7 |
| C4b | | | 12.5 | 34.3 | 53.1 |
| C4c | 3.1 | 6.2 | 6.2 | 18.7 | 65.6 |
| D7a | 3.8 | 3.8 | 46.1 | 15.3 | 30.7 |
| D7b | | | 19.2 | 38.4 | 42.3 |
| D7c | 3.8 | 11.5 | 46.1 | 26.9 | 11.5 |
| D8a | 5.4 | 21.6 | 37.8 | 21.6 | 13.5 |
| D8b | 17.1 | 14.2 | 39.9 | 14.2 | 14.2 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 5.0 | 5.0 | 40.0 | 5.0 | 45.0 |
| E5 | | | 69.3 | | 30.7 |
| F5 | | 9.0 | 13.6 | 31.8 | 45.4 |
| F6a | | 11.1 | 37.0 | 22.2 | 29.6 |
| F6b | 4.3 | 8.7 | 30.4 | 21.7 | 34.8 |
| G5 | | 8.6 | 17.3 | 26.0 | 47.8 |
| G6 | | | 12.5 | 18.7 | 68.7 |
| G7 | | | 10.0 | 35.0 | 55.0 |
| G8 | | | 24.1 | 41.3 | 34.4 |
| H6 | | 11.4 | 39.9 | 19.9 | 28.5 |
| H7 | | 2.7 | 33.3 | 19.4 | 44.4 |
| H8 | | | 26.4 | 32.3 | 41.1 |
| J7 | | 2.3 | 19.0 | 23.8 | 54.7 |
| J8a | | 6.2 | 21.8 | 12.5 | 59.3 |
| J8b | | 9.0 | 39.3 | 9.0 | 42.4 |

## Selected Classroom Project Student Questionnaire Data
(Percentage of Each Response by Each Class)

Question 12

Do you pick projects that you have to work hard on?

Scale

-never -not often -some-times -quite often -always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | | 12.0 | 64.0 | 12.0 | 12.0 |
| A5b | | 10.7 | 49.9 | 35.7 | 3.5 |
| A5c | | 23.0 | 38.4 | 30.7 | 7.6 |
| B7E | 14.2 | 14.2 | 71.4 | | |
| B7F | 11.7 | 11.7 | 58.8 | 17.6 | |
| B8 | 7.4 | 14.8 | 63.0 | 14.8 | |
| C4a | 37.5 | 15.6 | 25.0 | 9.3 | 12.5 |
| C4b | 15.6 | 12.5 | 37.5 | 31.2 | 3.1 |
| C4c | 9.6 | 3.2 | 41.9 | 32.2 | 12.9 |
| D7a | 3.8 | 15.3 | 50.0 | 23.0 | 7.6 |
| D7b | | 3.8 | 46.1 | 42.3 | 7.6 |
| D7c | | 11.5 | 53.8 | 26.9 | 7.6 |
| D8a | | 13.5 | 51.3 | 24.3 | 10.8 |
| D8b | 2.7 | 19.4 | 55.5 | 22.2 | |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 20.0 | 50.0 | 10.0 | 10.0 |
| E5 | 23.0 | 23.0 | 46.1 | | 7.6 |
| F5 | 4.5 | 9.0 | 45.4 | 27.2 | 13.6 |
| F6a | 7.4 | 11.1 | 48.1 | 22.2 | 11.1 |
| F6b | | 4.3 | 52.2 | 34.8 | 8.7 |
| G5 | | 8.6 | 56.5 | 21.7 | 13.0 |
| G6 | | | 55.5 | 22.2 | 22.2 |
| G7 | 5.0 | 5.0 | 60.0 | 30.0 | |
| G8 | | 6.8 | 62.0 | 31.0 | |
| H6 | 2.7 | 8.3 | 55.5 | 24.9 | 8.3 |
| H7 | 2.7 | 2.7 | 33.3 | 44.4 | 16.6 |
| H8 | | 5.8 | 73.5 | 14.7 | 5.8 |
| J7 | | 2.4 | 58.5 | 26.8 | 12.1 |
| J8a | | 15.6 | 62.5 | 18.7 | 3.1 |
| J8b | | 3.0 | 57.5 | 36.3 | 3.0 |

## Selected Classcoom Project Student Questionnaire Data

(Percentaje of Each Response by Each Class)

Question 13

For your projects, do you feel that you can make plans so that you can follow them?

Scale

-never -not often -some-times -quite often -always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 4.0 | 48.0 | 32.0 | 12.0 |
| A5b | | | 39.2 | 39.2 | 21.4 |
| A5c | | 3.8 | 23.0 | 23.0 | 50.0 |
| B7E | 14.2 | 14.2 | 38.9 | 23.8 | 9.5 |
| B7F | 11.7 | 5.8 | 23.5 | 29.4 | 29.4 |
| B8 | 3.7 | 11.1 | 48.1 | 22.2 | 14.8 |
| C4a | 12.5 | 9.3 | 28.1 | 28.1 | 21.8 |
| C4b | | | 21.8 | 43.7 | 34.3 |
| C4c | 3.1 | 9.3 | 21.8 | 21.8 | 43.7 |
| D7a | | 3.8 | 30.7 | 42.3 | 23.0 |
| D7b | | 3.8 | 3.8 | 53.8 | 38.4 |
| D7c | | 11.5 | 23.0 | 26.9 | 38.4 |
| D8a | 2.7 | 18.9 | 16.2 | 37.8 | 24.3 |
| D8b | | 5.5 | 50.0 | 33.3 | 11.1 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | | 30.0 | 35.0 | 15.0 | 20.0 |
| E5 | | 8.3 | 66.6 | | 24.9 |
| F5 | 4.5 | 4.5 | 50.0 | 31.8 | 9.0 |
| F6a | 7.4 | 11.1 | 40.7 | 25.9 | 14.8 |
| F6b | 4.5 | 27.3 | 9.1 | 36.4 | 22.7 |
| G5 | 8.6 | 8.6 | 17.3 | 43.8 | 21.7 |
| G6 | | 5.5 | 11.1 | 38.8 | 44.4 |
| G7 | 5.0 | 10.0 | 40.0 | 30.0 | 15.0 |
| G8 | 3.4 | 13.7 | 20.8 | 55.1 | 6.8 |
| H6 | 2.7 | 5.5 | 16.6 | 38.8 | 36.1 |
| H7 | 2.7 | 13.8 | 33.3 | 19.4 | 30.5 |
| H8 | 2.9 | 5.8 | 38.2 | 35.2 | 17.6 |
| J7 | 2.3 | 7.1 | 26.1 | 35.7 | 28.5 |
| J8a | 9.3 | 9.3 | 56.2 | 21.9 | 3.1 |
| J8b | | 15.1 | 27.2 | 27.2 | 30.3 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

**Question 14**

Do you ask other students for help before you go to the teacher?

**Scale**

1 -never
2 -not often
3 -some-times
4 -quite often
5 -always

| Class Code | Response Scale 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| A5a | 12.0 | 12.0 | 12.0 | 32.0 | 32.0 |
| A5b | 14.2 | 7.1 | 28.5 | 28.5 | 21.4 |
| A5c | 11.5 | 30.7 | 42.3 | 3.8 | 11.5 |
| B7E | 28.5 | 14.2 | 33.3 | 4.7 | 19.0 |
| B7F | 25.0 | 31.2 | 31.2 | 6.2 | 6.2 |
| B8 | 7.4 | 7.4 | 59.2 | 22.2 | 3.7 |
| C4a | 12.5 | 3.1 | 40.6 | 15.6 | 28.1 |
| C4b | 43.7 | 18.7 | 25.0 | 6.2 | 6.2 |
| C4c | 18.7 | 21.8 | 31.2 | 15.6 | 12.5 |
| D7a | 19.2 | 34.6 | 23.0 | 7.6 | 15.3 |
| D7b | 3.8 | 26.9 | 38.4 | 23.0 | 7.6 |
| D7c | 11.5 | 15.3 | 53.8 | 19.2 | |
| D8a | 13.5 | 18.9 | 43.2 | 16.2 | 8.1 |
| D8b | 19.4 | 16.6 | 36.1 | 16.6 | 11.1 |
| | | | | | |

| Class Code | Response Scale 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| E4 | 35.0 | 20.0 | 40.0 | | 5.0 |
| E5 | 53.8 | 7.6 | 15.3 | 7.6 | 15.3 |
| F5 | 4.5 | 13.6 | 50.0 | 27.2 | 4.5 |
| F6a | 15.3 | 11.5 | 50.0 | 11.5 | 11.5 |
| F6b | 9.1 | 13.6 | 45.5 | 18.2 | 13.6 |
| G5 | 26.0 | 8.6 | 26.0 | 26.0 | 13.0 |
| G6 | 27.7 | 22.2 | 33.3 | 16.6 | |
| G7 | | 5.0 | 55.0 | 25.0 | 15.0 |
| G8 | 6.8 | 17.2 | 48.2 | 20.6 | 6.8 |
| H6 | 33.3 | 8.3 | 36.1 | 13.8 | 8.3 |
| H7 | 2.7 | 11.1 | 47.2 | 19.4 | 19.4 |
| H8 | 3.0 | 3.0 | 39.3 | 36.3 | 18.1 |
| J7 | 2.3 | 11.9 | 47.6 | 30.9 | 7.1 |
| J8a | | 15.6 | 40.6 | 34.3 | 9.3 |
| J8b | | 33.3 | 42.4 | 12.1 | 12.1 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

### Question 15

Do you pick projects you can really do?

**Scale**

- never
- not often
- some-times
- quite often
- always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | | 24.0 | 28.0 | 44.0 |
| A5b | | 3.7 | 33.3 | 40.7 | 22.2 |
| A5c | | 3.8 | 19.2 | 34.6 | 42.3 |
| B7E | | 14.2 | 23.8 | 14.2 | 47.6 |
| B7F | 5.8 | 5.8 | 29.4 | 17.6 | 41.1 |
| B8 | 3.8 | 3.8 | 23.1 | 46.2 | 27.0 |
| C4a | 3.1 | 6.2 | 18.7 | 31.2 | 40.6 |
| C4b | | | 6.2 | 25.0 | 68.7 |
| C4c | 3.1 | 6.2 | 21.8 | 12.5 | 56.2 |
| D7a | | 3.8 | 26.9 | 19.2 | 50.0 |
| D7b | | | 7.6 | 30.7 | 61.5 |
| D7c | | | 16.0 | 44.0 | 40.0 |
| D8a | | 5.4 | 18.9 | 32.4 | 43.2 |
| D8b | | 5.5 | 24.9 | 36.1 | 33.3 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 5.0 | 5.0 | 25.0 | 10.0 | 55.0 |
| E5 | | | 61.5 | 15.3 | 23.0 |
| F5 | | | 14.2 | 33.3 | 52.3 |
| F6a | | 14.8 | 14.8 | 14.8 | 55.5 |
| F6b | 8.7 | 4.3 | 13.0 | 43.5 | 30.4 |
| G5 | | 8.6 | 13.0 | 21.7 | 56.5 |
| G6 | | 16.6 | 22.2 | 22.2 | 38.8 |
| G7 | | 5.0 | 30.0 | 35.0 | 30.0 |
| G8 | | 3.4 | 31.0 | 41.3 | 24.1 |
| H6 | | 5.5 | 16.6 | 30.5 | 47.2 |
| H7 | | | 8.3 | 55.5 | 36.1 |
| H8 | | | 20.5 | 41.1 | 38.2 |
| J7 | | 4.7 | 14.2 | 38.0 | 42.8 |
| J8a | | | 28.1 | 43.7 | 28.1 |
| J8b | | | 29.0 | 32.2 | 38.7 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 16

If you need help and can't get it right away, do you do other things?

Scale

- never 1
- not often 2
- some-times 3
- quite often 4
- always 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | | 12.0 | 16.0 | 24.0 | 48.0 |
| A5b | 3.5 | 14.2 | 39.2 | 21.4 | 21.4 |
| A5c | 30.7 | 11.5 | 38.4 | 11.5 | 7.6 |
| B7E | 14.2 | 14.2 | 33.3 | 9.5 | 28.5 |
| B7F | 11.7 | 17.6 | 23.5 | 17.6 | 29.4 |
| B8 | 18.5 | 11.1 | 55.5 | 3.8 | 11.1 |
| C4a | 9.3 | 3.1 | 59.3 | 6.3 | 21.8 |
| C4b | 6.4 | 3.2 | 22.5 | 29.0 | 38.7 |
| C4c | 12.5 | 6.2 | 12.5 | 31.2 | 37.5 |
| D7a | 7.6 | 3.8 | 38.4 | 38.4 | 11.5 |
| D7b | 3.8 | 15.3 | 30.7 | 26.9 | 23.0 |
| D7c | 3.8 | 11.5 | 30 7 | 46.1 | 7.6 |
| D8a | 5.4 | 18.9 | 37.8 | 21.6 | 16.2 |
| D8b | 11.1 | 13.8 | 47.2 | 16.6 | 11.1 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 15.0 | 20.0 | 30.0 | 15.0 | 20.0 |
| E5 | | 30.7 | 69.2 | | |
| F5 | 18.1 | 4.5 | 22.7 | 27.2 | 27.2 |
| F6a | 11.1 | 3.7 | 33.3 | 33.3 | 18.5 |
| F6b | 13.0 | 17.4 | 30.4 | 21.7 | 17.4 |
| G5 | 17.3 | 8.6 | 30.4 | 13.0 | 30.4 |
| G6 | 5.5 | 16.6 | 27.7 | 22.2 | 27.7 |
| G7 | | | 45.0 | 40.0 | 15.0 |
| G8 | 3.4 | 10.3 | 24.1 | 55.1 | 6.8 |
| H6 | 22.2 | 11.1 | 33.3 | 13.8 | 19.4 |
| H7 | 2.7 | 13.8 | 30.5 | 36.1 | 16.6 |
| H8 | | 17.6 | 32.3 | 35.2 | 14.7 |
| J7 | 2.3 | 7.1 | 35.7 | 40.4 | 14.2 |
| J8a | | 12.5 | 46.8 | 28.1 | 12.5 |
| J8b | 3.0 | 3.0 | 45.4 | 33.3 | 15.1 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

### Question 17

Do you bring materials, pictures, things, etc. of your own from home to use with your project or your friends' projects?

Scale

- never
- not often
- some-times
- quite often
- always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 20.0 | 12.0 | 36.0 | 16.0 | 16.0 |
| A5b | 3.5 | 10.7 | 64.2 | 17.8 | 3.5 |
| A5c | 7.6 | 7.6 | 50.0 | 23.0 | 11.5 |
| B7E | 9.5 | 9.5 | 42.8 | 23.8 | 14.2 |
| B7F | 17.6 | 5.8 | 35.2 | 23.5 | 17.6 |
| B8 | 11.1 | 25.9 | 29.6 | 29.6 | 3.7 |
| C4a | 6.2 | 3.1 | 46.8 | 25.0 | 18.7 |
| C4b | 9.3 | 6.2 | 40.6 | 18.7 | 25.0 |
| C4c | 6.2 | 9.3 | 46.8 | 12.5 | 25.0 |
| D7a | | 11.5 | 19.2 | 42.3 | 26.9 |
| D7b | | 7.6 | 11.5 | 53.8 | 26.9 |
| D7c | | | 34.6 | 42.3 | 23.0 |
| D8a | 5.4 | 13.5 | 24.3 | 32.4 | 24.3 |
| D8b | 5.5 | 8.3 | 33.3 | 27.7 | 24.9 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 30.0 | 20.0 | 35.0 | 5.0 | 10.0 |
| E5 | 24.9 | 16.6 | 50.0 | | 8.3 |
| F5 | | 9.0 | 4.5 | 31.8 | 54.5 |
| F6a | | 7.4 | 25.9 | 37.0 | 29.6 |
| F6b | | | 12.4 | 26.1 | 56.5 |
| G5 | | 4.3 | 26.0 | 26.0 | 43.4 |
| G6 | | | 23.5 | 41.1 | 35.2 |
| G7 | | 5.0 | 25.0 | 55.0 | 15.0 |
| G8 | | 3.4 | 44.8 | 34.4 | 17.2 |
| H6 | 2.7 | 13.8 | 27.7 | 27.7 | 27.7 |
| H7 | | 2.7 | 27.7 | 36.1 | 33.3 |
| H8 | | 5.8 | 29.4 | 35.2 | 29.4 |
| J7 | | 14.2 | 26.1 | 38.0 | 21.4 |
| J8a | 9.3 | 21.8 | 28.1 | 25.0 | 15.6 |
| J8b | | 6.0 | 9.0 | 45.4 | 39.3 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

**Question 18**

Can you find a good place to work on your project?

**Scale**

-never -not often -some-times -quite often -always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A4a | 4.0 | 8.0 | 20.0 | 28.0 | 40.0 |
| A4b | 3.5 | | 42.8 | 28.5 | 24.9 |
| A5c | 3.8 | 3.8 | 19.2 | 30.7 | 42.3 |
| B7E | 1.7 | 9.5 | 9.5 | 14.2 | 61.9 |
| B7F | | 11.7 | 35.2 | 23.5 | 29.4 |
| B8 | 3.7 | 7.4 | 29.6 | 29.6 | 29.6 |
| C4a | 18.7 | 15.6 | 37.5 | 6.2 | 21.8 |
| C4b | | 12.5 | 9.3 | 28.1 | 50.0 |
| C4c | 3.1 | | 15.6 | 21.8 | 59.3 |
| D7a | | 7.6 | 15.3 | 53.8 | 23.0 |
| D7b | | 11.5 | 15.3 | 50.0 | 23.0 |
| D7c | | 7.6 | 23.0 | 34.6 | 34.6 |
| D8a | 18.9 | 13.5 | 21.6 | 24.3 | 21.6 |
| D8b | 16.6 | 13.8 | 33.3 | 11.1 | 24.9 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 10.0 | 20.0 | 20.0 | 40.0 |
| E5 | 7.6 | | 61.5 | 7.6 | 23.0 |
| F5 | 9.0 | 9.0 | 27.2 | 27.2 | 27.2 |
| F6a | 7.4 | 11.1 | 37.0 | 14.8 | 29.6 |
| F6b | 4.3 | | 4.3 | 47.8 | 43.5 |
| G5 | 4.3 | 8.6 | 4.3 | 17.3 | 65.2 |
| G6 | | | | 16.6 | 83.3 |
| G7 | | 5.0 | 20.0 | 55.0 | 20.0 |
| G8 | | | 24.1 | 44.8 | 31.0 |
| H6 | 13.8 | 2.7 | 22.2 | 27.7 | 33.3 |
| H7 | 2.7 | 2.7 | 24.9 | 24.9 | 44.4 |
| H8 | 2.9 | 2.9 | 20.5 | 41.1 | 32.3 |
| J7 | | 4.7 | 14.2 | 28.5 | 52.3 |
| J8a | 6.2 | 12.5 | 34.3 | 28.1 | 18.7 |
| J8b | 3.0 | 3.0 | 18.1 | 45.4 | 30.3 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 19

Do you pick your projects from a list the teacher gives you?

Scale

-never -not often -some-times -quite often -always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 4.0 | 28.0 | 16.0 | 48.0 |
| A5b | 35.7 | 17.8 | 32.1 | 10.7 | 3.5 |
| A5c | 7.6 | 11.5 | 30.7 | 11.5 | 38.4 |
| B7E | 90.4 | 9.5 | | | |
| B7F | 46.6 | 33.3 | 19.9 | | |
| B8 | 38.5 | 30.8 | 30.8 | | |
| C4a | 6.2 | 6.2 | 40.6 | 21.8 | 25.0 |
| C4b | | 3.1 | 84.3 | 6.2 | 6.2 |
| C4c | 6.2 | 12.5 | 25.0 | 9.3 | 46.8 |
| D7a | 23.0 | 38.4 | 34.6 | 3.8 | |
| D7b | 46.1 | 19.2 | 23.0 | 11.5 | |
| D7c | 38.4 | 30.7 | 30.7 | | |
| D8a | 35.1 | 24.3 | 29.7 | 8.1 | 2.7 |
| D8b | 50.0 | 19.4 | 24.9 | 2.7 | 2.7 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 20.0 | 15.0 | 35.0 | 10.0 | 20.0 |
| E5 | 24.9 | 8.3 | 24.9 | | 41.6 |
| F5 | 18.1 | 18.1 | 45.4 | 9.0 | 9.0 |
| F6a | 51.8 | 18.5 | 22.2 | 3.7 | 3.7 |
| F6b | 8.7 | 17.4 | 56.5 | 8.7 | 8.7 |
| G5 | 13.0 | 34.7 | 47.8 | | 4.3 |
| G6 | 5.5 | 33.3 | 44.4 | 16.6 | |
| G7 | 10.0 | 50.0 | 30.0 | 10.0 | |
| G8 | 6.8 | 44.8 | 37.9 | 10.3 | |
| H6 | 76.2 | 15.1 | 8.3 | | |
| H7 | 30.5 | 27.7 | 38.8 | 2.7 | |
| H8 | | 33.3 | 48.4 | 9.0 | 9.0 |
| J7 | 57.4 | 33.3 | 7.1 | 2.3 | |
| J8a | 53.1 | 31.2 | 12.5 | 3.1 | |
| J8b | 68.7 | 28.1 | 3.1 | | |

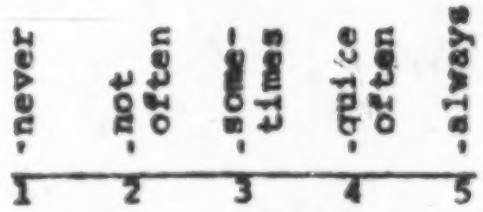
## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 20

Do you care about how other kids are doing on their projects?

Scale




| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 8.0 | 32.0 | 28.0 | 24.0 | 8.0 |
| A5b | 7.1 | 28.5 | 46.4 | 14.2 | 3.5 |
| A5c | 15.3 | 15.3 | 34.6 | 23.0 | 11.5 |
| B7E | 9.5 | 14.2 | 52.3 | 19.0 | 4.7 |
| B7F | 26.6 | 6.6 | 33.3 | 19.9 | 13.3 |
| B8 | 7.7 | 53.8 | 34.6 | 3.8 | |
| C4a | 3.1 | 3.1 | 40.6 | 9.3 | 43.7 |
| C4b | 12.5 | 18.7 | 31.2 | 21.8 | 15.6 |
| C4c | 12.5 | 18.7 | 21.8 | 28.1 | 18.7 |
| D7a | 19.2 | 15.3 | 46.1 | 15.3 | 3.8 |
| D7b | | 19.2 | 23.0 | 46.1 | 11.5 |
| D7c | 11.5 | 23.0 | 53.8 | 11.5 | |
| D8a | 13.5 | 16.2 | 48.6 | 18.9 | 2.7 |
| D8b | 27.7 | 24.9 | 36.1 | 8.3 | 2.7 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 25.0 | 25.0 | 35.0 | | 15.0 |
| E5 | 24.9 | 8.3 | 58.3 | | 8.3 |
| F5 | 9.0 | 4.5 | 63.6 | 9.0 | 13.6 |
| F6a | 18.5 | 25.9 | 37.0 | 18.5 | |
| F6b | 21.7 | 13.0 | 34.8 | 26.1 | 4.3 |
| G5 | 13.0 | 4.3 | 52.1 | 17.3 | 13.0 |
| G6 | 16.6 | 11.1 | 38.8 | 22.2 | 11.1 |
| G7 | 5.0 | 15.0 | 50.0 | 25.0 | 5.0 |
| G8 | 6.8 | 13.7 | 51.7 | 13.7 | 13.7 |
| H6 | 16.6 | 19.4 | 52.7 | 2.7 | 8.3 |
| H7 | 8.3 | 2.7 | 41.6 | 38.8 | 8.3 |
| H8 | | 15.1 | 48.4 | 21.2 | 15.1 |
| J7 | | 4.7 | 35.7 | 40.4 | 19.0 |
| J8a | 9.3 | 21.8 | 40.6 | 18.7 | 9.3 |
| J8b | 3.1 | 12.5 | 50.0 | 25.0 | 9.3 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

### Question 21

Do you get your projects done in the amount of time you planned on?

**Scale**

1 - never
2 - not often
3 - some-times
4 - quite often
5 - always

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 16.0 | 40.0 | 32.0 | 8.0 |
| A5b | 10.7 | 10.7 | 64.2 | 10.7 | 3.5 |
| A5c | 7.6 | 23.0 | 30.7 | 23.0 | 15.3 |
| B7E | 4.7 | 23.8 | 47.6 | 14.2 | 9.5 |
| B7F | 7.1 | 14.2 | 37.7 | 28.5 | 14.2 |
| B8 | 3.8 | 15.4 | 53.8 | 15.4 | 11.5 |
| C4a | 21.8 | 31.2 | 37.5 | 6.2 | 3.1 |
| C4b | 9.3 | 18.7 | 34.3 | 28.1 | 9.3 |
| C4c | | 3.2 | 41.9 | 32.2 | 22.5 |
| D7a | 3.8 | 3.8 | 53.8 | 34.6 | 3.8 |
| D7b | | 7.6 | 26.9 | 61.5 | 3.8 |
| D7c | 3.8 | 34.6 | 26.9 | 30.7 | 3.8 |
| D8a | 8.1 | 21.6 | 35.1 | 27.0 | 8.1 |
| D8b | 14.7 | 11.7 | 52.9 | 11.7 | 8.8 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 25.0 | 40.0 | 5.0 | 20.0 |
| E5 | 7.6 | 23.0 | 53.8 | | 15.3 |
| F5 | | 4.5 | 36.3 | 40.9 | 18.1 |
| F6a | 3.7 | 29.6 | 48.1 | 11.1 | 7.4 |
| F6b | 4.3 | 4.3 | 56.5 | 30.4 | 4.3 |
| G5 | 4.3 | 13.0 | 47.8 | 17.3 | 17.3 |
| G6 | | 11.1 | 55.5 | 33.3 | |
| G7 | | 5.0 | 45.0 | 45.0 | 5.0 |
| G8 | | 17.2 | 34.4 | 44.8 | 3.4 |
| H6 | 2.7 | 8.3 | 44.4 | 33.3 | 11.1 |
| H7 | 2.7 | | 33.3 | 47.2 | 16.6 |
| H8 | | 12.1 | 33.3 | 51.5 | 3.0 |
| J7 | | 14.2 | 42.8 | 35.7 | 7.1 |
| J8a | 6.2 | 28.1 | 50.0 | 15.6 | |
| J8b | | 28.1 | 46.8 | 25.0 | |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 22

Do other kids bother you while you are working on your project?

Scale

-never 1 -not often 2 -some-times 3 -quite often 4 -always 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | | 20.0 | 56.0 | 12.0 | 12.0 |
| A5b | 3.5 | 39.2 | 53.5 | | 3.5 |
| A5c | 11.5 | 26.9 | 38.4 | 15.3 | 7.6 |
| B7E | | 19.0 | 52.3 | 14.2 | 14.2 |
| B7F | 13.3 | 19.9 | 26.6 | 19.9 | 19.9 |
| B8 | 11.5 | 26.9 | 30.8 | 19.2 | 11.5 |
| C4a | 12.5 | 15.6 | 46.8 | 6.2 | 18.7 |
| C4b - | 43.7 | 31.2 | 9.3 | 15.6 | |
| C4c | 12.5 | 34.3 | 31.2 | 6.2 | 15.6 |
| D7a | 11.5 | 38.4 | 42.3 | 7.6 | |
| D7b | | 34.6 | 46.1 | 7.6 | 11.5 |
| D7c | 8.0 | 24.0 | 44.0 | 16.0 | 8.0 |
| D8a | 13.5 | 24.3 | 40.5 | 8.1 | 13.5 |
| D8b | 13.8 | 11.1 | 55.5 | 11.1 | 8.3 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 5.5 | 16.6 | 44.4 | 16.6 | 16.6 |
| E5 | 7.6 | 30.7 | 38.4 | 7.6 | 15.3 |
| F5 | 22.7 | 27.2 | 22.7 | 13.6 | 13.6 |
| F6a | 3.7 | 25.9 | 44.4 | 22.2 | 3.7 |
| F6b | 17.4 | 38.8 | 39.1 | 4.3 | 4.3 |
| G5 | 13.0 | 21.7 | 43.4 | [illegible] | 8.6 |
| G6 | 5.5 | 27.7 | 33.3 | [illegible] | 16.6 |
| G7 | 10.0 | 45.0 | 35.0 | 10.0 | |
| G8 | 6.8 | 31.0 | 58.6 | | 3.4 |
| H6 | 8.5 | 5.7 | 45.6 | 19.9 | 19.9 |
| H7 | 8.3 | 38.8 | 30.5 | 13.8 | 8.3 |
| H8 | 15.1 | 33.3 | 39.3 | 6.0 | 6.0 |
| J7 | 11.9 | 28.5 | 45.2 | 11.9 | 2.3 |
| J8a | 6.2 | 12.5 | 62.5 | 15.6 | 3.1 |
| J8b | 12.5 | 37.5 | 31.2 | 9.3 | 9.3 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

**Question 23**

For your projects do you use things such as:
a) chemicals, b) construction materials (cardboard, paint, paper, wood, paste, clay, scissors), c) tools, d) "junk" (buttons, cloth, jars, tin cans, string) etc.)

**Scale**

1 - never
2 - not often
3 - some-times
4 - quite often
5 - always

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | | 16.0 | 56.0 | 16.0 | 12.0 |
| A5b | 3.5 | 17.8 | 46.4 | 24.9 | 7.1 |
| A5c | | 7.6 | 30.7 | 38.4 | 23.0 |
| B7E | 19.0 | 4.7 | 42.8 | 19.0 | 14.2 |
| B7F | | 13.3 | 53.2 | 19.9 | 13.3 |
| B8 | 7.8 | 26.9 | 53.8 | | |
| C4a | 3.1 | 9.3 | 43.7 | 18.7 | 25.0 |
| C4b | | 15.6 | 18.7 | 34.3 | 31.2 |
| C4c | | 3.1 | 46.8 | 25.0 | 25.0 |
| D7a | 15.3 | 15.3 | 38.4 | 19.2 | 11.5 |
| D7b | 19.2 | 26.9 | 50.0 | 3.8 | |
| D7c | 23.0 | 15.3 | 53.8 | 7.6 | |
| D8a | 16.2 | 10.8 | 43.2 | 13.5 | 16.2 |
| D8b | 5.7 | 17.1 | 42.8 | 14.2 | 19.9 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 25.0 | 50.0 | 10.0 | 5.0 |
| E5 | 33.3 | 8.3 | 50.0 | | 8.3 |
| F5 | 4.5 | 27.2 | 22.7 | 31.8 | 13.6 |
| F6a | | 11.1 | 33.3 | 29.6 | 25.9 |
| F6b | | 9.1 | 40.1 | 13.6 | 36.4 |
| G5 | | | 26.0 | 34.7 | 39.1 |
| G6 | | 11.1 | 11.1 | 44.4 | 33.3 |
| G7 | | 5.0 | 15.0 | 60.0 | 20.0 |
| G8 | | 6.8 | 44.8 | 37.9 | 10.3 |
| H6 | | 11.1 | 33.3 | 36.1 | 19.4 |
| H7 | | 8.3 | 36.1 | 33.3 | 22.2 |
| H8 | | 9.0 | 24.2 | 36.3 | 30.3 |
| J7 | | 2.3 | 33.3 | 35.7 | 28.5 |
| J8a | 9.3 | 18.7 | 28.1 | 31.2 | 12.5 |
| J8b | | 9.3 | 46.8 | 31.2 | 12.5 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 24

Do other kids come to you for help?

Scale

- never
- not often
- some-times
- quite often
- always

1 2 3 4 5

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 4.0 | 16.0 | 44.0 | 36.0 | |
| A5b | 7.1 | 10.7 | 39.2 | 28.5 | 14.2 |
| A5c | 19.2 | 7.6 | 53.8 | 7.6 | 11.5 |
| B7E | 23.8 | 23.8 | 42.8 | 9.5 | |
| B7F | 6.6 | 13.3 | 59.9 | 19.9 | |
| B8 | 7.8 | 23.1 | 50.0 | 19.2 | |
| C4a | 3.1 | 15.6 | 53.1 | 9.3 | 18.7 |
| C4b | 46.8 | 28.1 | 21.8 | 3.1 | |
| C4c | | 18.7 | 56.2 | 15.6 | 9.3 |
| D7a | | 23.0 | 69.2 | 7.6 | |
| D7b | 3.8 | 11.5 | 69.2 | 7.6 | 7.6 |
| D7c | 30.7 | 15.3 | 53.8 | | |
| D8a | 13.5 | 37.8 | 37.8 | 5.4 | 5.4 |
| D8b | 16.6 | 30.5 | 44.4 | 2.7 | 5.5 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 10.0 | 25.0 | 50.0 | 10.0 | 5.0 |
| E5 | 15.3 | 30.7 | 46.1 | | 7.6 |
| F5 | | 9.0 | 50.0 | 31.8 | 9.0 |
| F6a | 14.8 | 18.5 | 51.8 | 11.1 | 3.7 |
| F6b | 8.7 | 13.0 | 47.8 | 30.4 | |
| G5 | 4.3 | 17.3 | 52.1 | 17.3 | 8.6 |
| G6 | 5.5 | 11.1 | 66.6 | 11.1 | 5.5 |
| G7 | | 20.0 | 70.0 | 10.0 | |
| G8 | 10.3 | 13.7 | 65.5 | 10.3 | |
| H6 | 22.2 | 16.6 | 50.0 | 8.3 | 2.7 |
| H7 | 2.7 | 27.7 | 38.8 | 24.9 | 5.5 |
| H8 | 3.0 | 18.1 | 51.5 | 21.2 | 6.0 |
| J7 | | 11.9 | 66.6 | 19.0 | 2.3 |
| J8a | 9.3 | 18.7 | 59.3 | 12.5 | |
| J8b | 3.1 | 28.1 | 59.3 | 9.3 | |

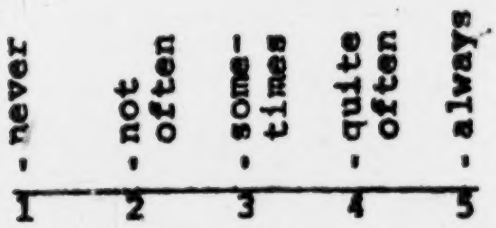
## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 25

Do you change things around in the room in order to do your project?

Scale




| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 20.0 | 12.0 | 52.0 | 8.0 | 8.0 |
| A5b | 28.5 | 39.2 | 32.1 | | |
| A5c | 33.3 | 33.3 | 25.0 | 8.3 | |
| B7E | 14.2 | 14.2 | 42.8 | 23.8 | 4.7 |
| B7F | 39.9 | 13.3 | 33.3 | 6.6 | 6.6 |
| B8 | 16.0 | 36.0 | 28.0 | 16.0 | 4.0 |
| C4a | 6.2 | 9.3 | 28.1 | 25.0 | 31.2 |
| C4b | 12.5 | 21.8 | 46.8 | 12.5 | 6.2 |
| C4c | 15.6 | 9.3 | 18.7 | 37.5 | 18.7 |
| D7a | 53.8 | 26.9 | 7.6 | 11.5 | |
| D7b | 26.9 | 26.9 | 30.7 | 7.6 | 7.6 |
| D7c | 42.3 | 19.2 | 26.9 | 7.6 | 3.8 |
| D8a | 37.8 | 21.6 | 24.3 | 13.5 | 2.7 |
| D8b | 33.3 | 19.4 | 30.5 | 13.8 | 2.7 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 35.0 | 30.0 | 25.0 | | 10.0 |
| E5 | 38.4 | 38.4 | 23.0 | | |
| F5 | 14.2 | 38.0 | 33.3 | | 14.2 |
| F6a | 18.5 | 48.1 | 25.9 | 3.7 | 3.7 |
| F6b | 17.4 | 34.8 | 34.8 | 4.3 | 8.7 |
| G5 | 52.1 | 21.7 | 13.0 | 13.0 | |
| G6 | 22.2 | 55.5 | 11.1 | 5.5 | 5.5 |
| G7 | 30.0 | 35.0 | 20.0 | 15.0 | |
| G8 | 20.6 | 24.1 | 44.8 | 10.3 | |
| H6 | 44.4 | 24.9 | 22.2 | 2.7 | 5.5 |
| H7 | 34.2 | 28.5 | 22.8 | 14.2 | |
| H8 | 15.1 | 42.4 | 33.3 | 3.0 | 6.0 |
| J7 | | 30.9 | 38.0 | 21.4 | 9.5 |
| J8a | 34.3 | 40.6 | 6.2 | 12.5 | 6.2 |
| J8b | 18.7 | 50.0 | 21.8 | 6.2 | 3.1 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 25

Do you change things around in the room in order to do your project?

Scale

- never (1)
- not often (2)
- some-times (3)
- quite often (4)
- always (5)

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 20.0 | 12.0 | 52.0 | 8.0 | 8.0 |
| A5b | 28.5 | 39.2 | 32.1 | | |
| A5c | 33.3 | 33.3 | 25.0 | 8.3 | |
| B7E | 14.2 | 14.2 | 42.8 | 23.8 | 4.7 |
| B7F | 39.9 | 13.3 | 33.3 | 6.6 | 6.6 |
| B8 | 16.0 | 36.0 | 28.0 | 16.0 | 4.0 |
| C4a | 6.2 | 9.3 | 28.1 | 25.0 | 31.2 |
| C4b | 12.5 | 21.8 | 46.8 | 12.5 | 6.2 |
| C4c | 15.6 | 9.3 | 18.7 | 37.5 | 18.7 |
| D7a | 53.8 | 26.9 | 7.6 | 11.5 | |
| D7b | 26.9 | 26.9 | 30.7 | 7.6 | 7.6 |
| D7c | 42.3 | 19.2 | 26.9 | 7.6 | 3.8 |
| D8a | 37.8 | 21.6 | 24.3 | 13.5 | 2.7 |
| D8b | 33.3 | 19.4 | 30.5 | 13.8 | 2.7 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 35.0 | 30.0 | 25.0 | | 10.0 |
| E5 | 38.4 | 38.4 | 23.0 | | |
| F5 | 14.2 | 38.0 | 33.3 | | 14.2 |
| F6a | 18.5 | 48.1 | 25.9 | 3.7 | 3.7 |
| F6b | 17.4 | 34.8 | 34.8 | 4.3 | 8.7 |
| G5 | 52.1 | 21.7 | 13.0 | 13.0 | |
| G6 | 22.2 | 55.5 | 11.1 | 5.5 | 5.5 |
| G7 | 30.0 | 35.0 | 20.0 | 15.0 | |
| G8 | 20.6 | 24.1 | 44.8 | 10.3 | |
| H6 | 44.4 | 24.9 | 22.2 | 2.7 | 5.5 |
| H7 | 34.2 | 28.5 | 22.8 | 14.2 | |
| H8 | 15.1 | 42.4 | 33.3 | 3.0 | 6.0 |
| J7 | | 30.9 | 38.0 | 21.4 | 9.5 |
| J8a | 34.3 | 40.6 | 6.2 | 12.5 | 6.2 |
| J8b | 18.7 | 50.0 | 21.8 | 6.2 | 3.1 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 26

Do you work on your projects outside of school (at home)?

Scale

- never (1)
- not often (2)
- some-times (3)
- quite often (4)
- always (5)

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 12.0 | 24.0 | 32.0 | 4.0 | 28.0 |
| A5b | 24.9 | 14.2 | 42.8 | 14.2 | 3.5 |
| A5c | 16.0 | 12.0 | 36.0 | 24.0 | 12.0 |
| B7E | 57.1 | 14.2 | 14.2 | 4.7 | 9.5 |
| B7F | 33.3 | 26.6 | 26.6 | | 13.3 |
| B8 | | 15.4 | 34.6 | 34.6 | 15.4 |
| C4a | 40.6 | 25.0 | 31.2 | | 3.1 |
| C4b | 21.8 | 21.8 | 31.2 | 18.7 | 6.2 |
| C4c | 35.4 | 25.8 | 29.0 | 9.6 | |
| D7a | 23.0 | 15.3 | 46.1 | 15.3 | |
| D7b | 3.8 | 7.6 | 34.6 | 26.9 | 26.9 |
| D7c | 11.5 | 26.9 | 38.4 | 19.2 | 3.8 |
| D8a | 24.9 | 30.5 | 30.5 | 11.1 | 2.7 |
| D8b | 24.9 | 16.6 | 30.5 | 13.8 | 13.8 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 40.0 | 20.0 | 10.0 | 5.0 | 25.0 |
| E5 | 69.2 | | 15.3 | 7.6 | 7.6 |
| F5 | | 4.5 | 45.4 | 18.1 | 31.8 |
| F6a | 14.8 | 14.8 | 37.0 | 25.9 | 7.4 |
| F6b | 4.3 | 13.0 | 26.1 | 34.8 | 21.7 |
| G5 | 8.6 | 21.7 | 39.1 | 13.0 | 17.3 |
| G6 | | 33.3 | 61.1 | 5.5 | |
| G7 | 10.0 | 20.0 | 55.0 | 15.0 | |
| G8 | 13.7 | 37.9 | 37.9 | 10.3 | |
| H6 | 14.2 | 25.6 | 34.2 | 11.4 | 14.2 |
| H7 | | 13.8 | 30.5 | 44.4 | 11.1 |
| H8 | 3.1 | 6.2 | 37.5 | 40.6 | 12.5 |
| J7 | 2.3 | 33.3 | 52.3 | 9.5 | 2.3 |
| J8a | 18.7 | 25.0 | 34.3 | 21.8 | |
| J8b | 9.3 | 34.3 | 46.8 | 6.2 | 3.1 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 27

Do your parents think that this is a good way to do schoolwork?

Scale

1 - never
2 - not often
3 - some-times
4 - quite often
5 - always

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | 12.0 | 20.0 | 16.0 | 16.0 | 36.0 |
| A5b | | 5.2 | 10.5 | 37.3 | 36.8 |
| A5c | | 8.0 | 12.0 | 16.0 | 64.0 |
| B7E | 11.1 | | 22.2 | 27.7 | 38.8 |
| B7F | 13.3 | 13.3 | 13.3 | 6.6 | 53.2 |
| B8 | 3.8 | 15.4 | 19.2 | 38.5 | 23.1 |
| C4a | 6.2 | 3.1 | 9.3 | 15.6 | 65.6 |
| C4b | | 3.1 | 12.5 | 28.1 | 56.2 |
| C4c | | 9.3 | 12.5 | 18.7 | 59.3 |
| D7a | 16.0 | 16.0 | 8.0 | 40.0 | 20.0 |
| D7b | 7.6 | | 42.3 | 34.6 | 15.3 |
| D7c | 3.8 | 15.3 | 34.6 | 19.2 | 26.9 |
| D8a | 29.7 | 8.1 | 37.8 | 16.2 | 8.1 |
| D8b | 19.4 | 16.6 | 38.8 | 11.1 | 13.8 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 5.0 | | 30.0 | 10.0 | 55.0 |
| E5 | 23.0 | 15.3 | 15.3 | 7.6 | 38.4 |
| F5 | | 9.5 | 14.2 | 42.8 | 33.3 |
| F6a | | 8.6 | 21.7 | 26.0 | 43.4 |
| F6b | | 11.1 | 22.2 | 33.3 | 33.3 |
| G5 | 4.3 | 4.3 | 21.7 | 30.4 | 39.1 |
| G6 | | 5.8 | 11.7 | 23.5 | 58.8 |
| G7 | | 5.0 | 15.0 | 50.0 | 30.0 |
| G8 | 3.4 | | 31.0 | 31.0 | 34.4 |
| H6 | 9.3 | 12.5 | 21.8 | 15.6 | 40.6 |
| H7 | 16.6 | 5.5 | 22.2 | 27.7 | 27.7 |
| H8 | 21.8 | 9.3 | 31.2 | 25.0 | 12.5 |
| J7 | 2.3 | 19.0 | 21.4 | 30.9 | 26.1 |
| J8a | 9.3 | | 65.6 | 21.8 | 3.1 |
| J8b | 3.1 | 6.2 | 31.2 | 31.2 | 28.1 |

## Selected Classroom Project Student Questionnaire Data

(Percentage of Each Response by Each Class)

Question 28

Do you think that this is a better way of doing your schoolwork than the way you used to do it?

Scale

- never (1)
- not often (2)
- some-times (3)
- quite often (4)
- always (5)

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| A5a | | 4.0 | 4.0 | 24.0 | 68.0 |
| A5b | | 3.5 | 7.1 | 24.9 | 64.2 |
| A5c | 7.6 | | 11.5 | 7.6 | 73.0 |
| B7E | 4.7 | | 9.5 | 4.7 | 80.9 |
| B7F | | 13.3 | 39.9 | | 46.6 |
| B8 | | | 26.9 | 19.2 | 53.8 |
| C4a | 6.2 | | 3.1 | 3.1 | 87.5 |
| C4b | 3.1 | | | 3.1 | 93.7 |
| C4c | 3.1 | | 9.3 | 15.6 | 71.8 |
| D7a | 7.6 | | 15.3 | 11.5 | 65.3 |
| D7b | 7.6 | | 26.9 | 15.3 | 50.0 |
| D7c | 3.8 | 7.6 | 11.5 | 11.5 | 65.3 |
| D8a | 10.8 | 8.1 | 24.3 | 21.6 | 35.1 |
| D8b | 13.8 | 8.3 | 19.4 | 13.8 | 44.4 |
| | | | | | |

| Class Code | - Response Scale + | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| E4 | 15.0 | | 15.0 | 10.0 | 60.0 |
| E5 | 7.6 | | 23.0 | 15.3 | 53.8 |
| F5 | 4.5 | 13.6 | 22.7 | | 59.0 |
| F6a | | 3.7 | 7.4 | 18.5 | 70.3 |
| F6b | 4.3 | 4.3 | 13.0 | 13.0 | 65.2 |
| G5 | 4.3 | 4.3 | 13.0 | 17.3 | 60.8 |
| G6 | | | | 11.1 | 88.8 |
| G7 | 5.0 | | 15.0 | 15.0 | 65.0 |
| G8 | | | 3.4 | 17.2 | 79.3 |
| H6 | 8.3 | 5.5 | 8.3 | 11.1 | 66.6 |
| H7 | | 2.7 | 19.4 | 13.8 | 63.8 |
| H8 | 3.0 | 6.0 | 33.3 | 18.1 | 39.3 |
| J7 | 2.3 | 2.3 | 16.6 | 16.6 | 61.9 |
| J8a | 9.3 | 6.2 | 28.1 | 25.0 | 31.2 |
| J8b | | | 6.2 | 21.8 | 71.8 |

# Appendix E

## Materials Prepared For Dissemination

Project COD
52 Ash Street
New Bedford, Mass. 02740

Conference on Selected Classroom Project

Contained in this handout are the philosophical premises and pupil and teacher behaviors upon which the Selected Classroom Project is based. Also included are three sets of questions which need to be considered by teachers and administrators in making decisions about implementing the objectives of this Project. Members of the COD staff or Selected Classroom teachers would be willing to discuss particular objectives or questions with you.

## Selected Classroom Project Teachers

### Listed by Schools

Dartmouth Middle School
- Warren Berube
- Janice Martin
- Jean Labelle
- Garth Styan

Fairhaven - Rogers School
- Edward Chase
- Leonard Crane
- Carl Holstius

Fall River Middle School
- Patricia Murphy
- Ethel Winokoor

Fall River Dioceses
Holy Family Elementary-New Bedford
- Peter Crowley
- Sr. Theresa Sparrow

St. James - New Bedford
- Peter Azar
- Joseph Perry
- Robert Plourde

Falmouth - East Falmouth School
- James Marlinski
- Michael Ward

New Bedford - Carney Academy
- Emily Barr
- Richard Hitchcock

Somerset - Chace Street School
- Madeline Lanneville
- Joan Menard

St. Anne - New Bedford
- Sr. Theresa Fortin

### Listed by Grade Levels

Grade 4
- Emily Barr
- Madeline Lanneville
- Joan Menard

Grade 5
- Edward Chase
- Sr. Theresa Fortin
- Richard Hitchcock
- Michael Ward
- James Marlinski

Grade 6
- Peter Azar
- Leonard Crane
- Sr. Theresa Fortin
- Carl Holstius
- Joseph Perry
- Robert Plourde

Grade 7
- Peter Azar
- Peter Crowley
- Sr. Theresa Fortin
- Joan Labelle
- Patricia Murphy
- Joseph Perry
- Robert Plourde
- Sr. Theresa Sparrow
- Garth Styan

Grade 8
- Peter Azar
- Warren Berube
- Peter Crowley
- Sr. Theresa Fortin
- Janice Martin
- Joseph Perry
- Robert Plourde
- Sr. Theresa Sparrow
- Ethel Winokoor

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## Selected Classroom Project

The following statements constitute the rationale for the operation of Project COD's Selected Classroom.

1. Learners can and should initiate much of the classroom activity.
2. Being "wrong" is a normal human experience and need not be a basis for fear.
3. The development of openness and honesty with oneself and others is of high priority.
4. Responsibility is best learned in the exercise of freedom to make decisions.
5. Self respect is essential to respecting others and the environment.
6. Conversation and cooperative activity are part of a healthy learning situation.
7. Students can and should set learning goals and design activities with teacher guidance.
8. Learning situations should allow for in-depth exploration of a personal interest.
9. Some activities should generate intense learner involvement.
10. The ability of a learner to become concerned and committed is an important gauge of growth.
11. Opportunities for wonder, imagination and humor should be part of the classroom.
12. There are many legitimate forms of self expression other than language, and these need to be encouraged.
13. Classrooms need to have a rich variety of materials, equipment, and "things" to provide for learning through all the senses.
14. A large variety of activities can occur simultaneously.
15. The time and means required for a particular activity vary greatly among individuals.
16. Learning needs to be interdisciplinary, without arbitrary subject barriers.
17. Grouping for learning should vary with needs and interests, rather than being based on some fixed criteria.
18. Commercial materials and programs should be used in a way which protects the child's responsibility for his own learning.
19. The teacher needs to be a sensitive observer of individual and group activity.
20. The teacher should serve in a supportive and guiding role rather than a highly centralized and directive one.

As a result of developing such a classroom, some student and teacher behaviors can be predetermined.

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The teacher will be able to-

1. Document specific information about the interests, experiences, and any problems of every child for whom he has responsibility.
2. Provide a variety of learning activities to account for known differences among learners.
3. Assist each learner in setting his own achievement goals (AG).
4. Consult with each child as fewquently as required to affirm or redirect learners' AG.
5. Encourage learners to cooperate and share in activities, where appropriate.
6. Permit conversation among learners at any time appropriate to the learners.
7. Encourage freedom of movement within pre-designated areas, at the discretion of each learner.
8. Permit each learner to select his own learning style, with teacher direction given only when really necessary.
9. Work with small groups and with individual learners whenever possible.
10. Use a "total class" approach only when there is no other alternative, or when this is the most effective and/or efficient approach.
11. Judge when the simultaneous interruption of all children's activity is really necessary.
12. Allow individual children to continue with an activity for extended periods of time.
13. Encourage and assist children when they try to expand or further develop an activity.
14. Recognize effort which extends beyond the school day.
15. Provide materials and situations which elicit nonverbal responses.
16. Assist children in making adequate use of all resources.
17. ' encourage real learning (non-vicarious) experiences whenever possible.
18. Help each learner to evaluate his own achievement, as related to his own AG.
19. Give verbal and non-verbal encouragement at every opportunity to every child.
20. Raise questions for the students to respond to concerning their personal roles and responsibilities in learning.
21. Involve individuals or entire class in selecting curriculum content (topics, subjects, etc.).
22. Encourage children to follow through on their commitments to themselves and others.
23. Be physically accessible most of the time.
24. Listen carefully to those children who approach for assistance.
25. Engage in some good natured banter with children.
26. Have a more positive self-image of, and attitude toward, his professional role.

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Each student of each teacher will be able to:

1. Select his own accomplishment goals (AG).
2. Test his selected AG with his teacher.
3. Reject his originally selected AG in favor of more challenging or more realistic AG.
4. Select a working partner, or not, as he feels is appropriate to each task undertaken.
5. Demonstrate his responsibility to others with whom he is involved in a cooperative task.
6. Select a learning style which is most appropriate to each task and to his personal satisfaction.
7. Select a learning station which is appropriate to each task and to his personal satisfaction.
8. Alter the physical setting in some parts of the learning area.
9. Approach any task with a minimum of teacher direction.
10. Approach any task within the limitations of any classroom, school, community, or other regulations or requirements.
11. Approach any task within the limitations of any classroom.
12. Use materials which lend themselves to self-directed and creative expression.
13. Question any aspect of the task which he does not understand.
14. Seek readily the teacher's guidance in a constructive way when necessary.
15. Complete any task undertaken in a time allotment appropriate to the task and to his ability.
16. Remain at the same activity for extended periods of time when so motivated.
17. Behave in a manner which interferes least with other learners' and teachers' activities.
18. Respond to teachers' and pupils' requests in a manner of mutual respect.
19. Make requests of teachers and pupils in a manner of mutual respect.
20. Be honest in his interaction with others.
21. Intercede, with tact, if difficulties arise between other students.
22. Request cooperation from other students if they infringe upon his personal rights.
23. Consult other students concerning activities more often than he consults the teacher.
24. Proceed at any time without teacher instruction.
25. Use in a constructive way those moments when help is needed but not available.
26. Exhibit spontaneous behavior.
27. Smile, laugh, and joke with others in a natural, relaxed manner.
28. Display a variety of pictures, sayings, and other things which have personal value.
29. Expand any specific activity on his own terms and with his own initiative.
30. Extend any activity beyond the regular school day.

Should I as an <u>administrator</u> encourage teachers to develop more "open" classrooms? Here are some questions which need to be considered in making that decision.

1. Has a well-stated set of objectives for the intended classrooms been developed?

2. Do these give me a clear picture of the kind of classroom that will exist if the effort is successful?

3. Am I in agreement that this is a highly desirable setting for children to learn in?

4. Do I have two or more teachers with a high degree of interest in this kind of classroom?

5. Have I thoroughly discussed the objectives with the teachers?

6. Do these teachers and I have a similar vision of what success would look like?

7. Do I have full confidence in the judgement and skill of these particular teachers?

8. Can this effort be initiated without addtional expenses or without unusual privileges (those arrangements which could not be made for any teacher or class) for the teachers?

9. Do these teachers have a constructive relationship with most other faculty members?

10. Is this kind of classroom likely to meet with positive parental reaction?

11. Can I effectively communicate the nature of the intended classrooms to other teachers, administrators, and community?

12. Are there any policy, physical, or curricular restrictions in the school which will seriously handicap the development of these classrooms?

13. Am I prepared to spend some time in these classrooms-be involved in their development in a personal way?

Should I as a teacher try to initiate a more "open" classroom? Here are some questions which need to be considered in making that decision.

1. Have I a well stated set of objectives for the intended classroom?

2. Do I have a reasonably clear picture of the kind of classroom I will have if the objectives are attained?

3. Do I believe this is a highly desirable setting for kids to learn in?

4. Is there another teacher willing to make a similar effort?

5. Have I fully discussed the intended classroom with school administration?

6. Do these administrators understand what these classrooms will become?

7. Are these administrators openly supportive of this approach?

8. Can I initiate this classroom without special privileges or expenses?

9. Do I have a constructive relationship with most other faculty members?

10. Do I currently have a comfortable working relationship with students on a daily basis?

11. Do I wish that I could come to know students on a more personal level?

12. Can I cope with the teaching role needed for this type of classroom?

13. Am I somewhat disappointed by the response of students to standard classroom approaches and subject matter?

14. Do I have good communication with parents?

15. Are there any policy, physical, or curricular restrictions in this school which will seriously handicap my efforts at developing this kind of classroom?

If I decide that I will initiate a more "open" classroom, what kinds of questions need to be considered in planning? Here are a few suggestions.

1. How will I communicate to my students the purposes and nature of the classroom?

2. How will I communicate to other teachers working with the same children about the purposes and activities of my classroom?

3. How will I communicate to parents the purpose and nature of my classroom?

4. How can I add to my knowledge about the interests, abilities, and learning preferences of my students?

5. What are the limitations in my teaching situation?

6. What is my view of an achievement goal and how can I help students to determine theirs?

7. How am I going to help students plan their activities?

8. How can I help students to use a greater variety of resources in learning?

9. What changes in the physical setting of my classroom might enhance student activity?

10. How might a student and I evaluate the results?

11. What do the student and I do after he has achieved a particular goal?

12. How will the students and I deal with problems of interpersonal communication and cooperation?

13. What is the effect of my personal behavior on that of students, other teachers, administrators, and parents?

Appendix F

Sample Student Goal-Setting Form

NAME: _____

SOCIAL STUDIES WORK BOOK DATE COMPLETED: _____

PROJECT #: _____ DATE STARTED: _____ ESTIMATED COMPLETION: _____

TITLE OF PROJECT: _____

_____

DESCRIPTION OF PROJECT: GOALS: WHAT AM I GOING TO DO?

DESCRIPTION OF EXHIBIT:

LIST OF WAYS I INTEND TO ACHIEVE MY GOALS:

LIST OF MATERIALS I WILL NEED:

HOW I INTEND TO OBTAIN MY MATERIALS:

HOW MUCH TIME I WILL NEED TO COMPLETE THE PROJECT:

HOW I INTEND TO USE THE TIME:

NAME: _____

## DIARY OF PROGRESS

DATE: _____

Appendix G

1. Criteria For Evaluating Student Goal Setting, Planning, and Evaluation

2. Student Interview Questions For Qualitative Analysis

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Folders

I. Goal setting quality:
   A. Cognitive level of goals set
      1. To gain knowledge
      2. Application
      3. Analysis
      4. Sythesis
      5. Evaluation

   B. There is a conscious development from one goal to a further one (connection between some projects)
      1. None
      2. Little
      3. Some
      4. Alot

   C. There is an increase in the challenge of goals from earlier to later projects
      1. None
      2. Little
      3. Some
      4. Alot

   D. (interview only) The goal selected is related to the personal needs and interests of the student as opposed to simply "doing" a project.
      1. Never
      2. Sometimes
      3. Often

II. Planning quality
   A. There is a plan
      Yes
      No

   B. The steps are clearly stated
      1. Never
      2. Sometimes
      3. Often

   C. The steps have a logical development
      1. Never
      2. Sometimes
      3. Often

   D. There is a development from simply gaining knowledge to application and beyond within a single project.
      1. Never
      2. Sometimes
      3. Often

III. Teacher evaluation quality

A. Teacher, pupil, and parent can understand the meaning of the evaluation (written)
   1. Yes
   2. No
   3. ?

B. Specific observations of personal growth (or lack of it) are used rather than vague generalizations.
   1. Yes
   2. No

C. There are both positive and negative points in the evaluation.
   1. Yes
   2. No
   3. Nebulous

D. The student is able to identify specific areas in which to improve from the evaluation.
   1. Yes
   2. No

E. The interaction between teacher and pupil is relaxed, open and positive during evaluation. (interview only)
   1. Never
   2. Sometimes
   3. Often

F. Planning improves from project to project
   1. None
   2. Some
   3. Alot

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Interview data:

Questions:

1. Do you feel that the goals you have set go beyond simply collecting knowledge?

   a. never
   b. rarely
   c. sometimes
   d. often

2. Have any of your projects developed out of previous ones?

   a. never
   b. rarely
   c. sometimes
   d. often

3. Is the project you are now involved in more challenging than previous projects?

   a. no
   b. little
   c. yes

4. Are the goals you have set really interesting to you or just "something" to do?

   a. all
   b. half
   c. few
   d. none

5. Do you write a plan for each project?

   a. yes
   b. no

6. Do you feel that someone else reading your plan would know what you were doing and how you were going about it?

   a. yes
   b. no

7. Do you feel that your planning for work has improved from project to project?

   a. yes
   b. no
   c. ?

8. Do you fully understand what the teacher means when he or she writes an evaluation statement?

   a. yes
   b. no
   c. ?

9. Do your parents understand what is meant?

   a. yes
   b. no
   c. ?

10. Do you feel that the teachers comments are specific enough so that you understand how to improve?

   a. yes
   b. no
   c. ?

11. When having an evaluation conference with the teacher, are you relaxed and open in what you say?

   a. yes
   b. no

12. Is the teacher helpful and positive in what he or she says?

   a. yes
   b. no
   c. ?

## Appendix H

1. Description of PROSE Journals
2. 4th week report of Journals
3. Final Report of Journals

# THE PROSE DAILY JOURNAL

AN INSTRUMENT TO MEASURE THE AFFECTIVE DOMAIN

I. DESCRIPTION:

A. PROSE is a highly sensitive, revolutionary instrument designed to measure the quality of humanistic experience. The documentation of this instrument enables it to make the following claims:

1) PROSE accommodates, transforms and objectively evaluates the subjective experience of students;

2) PROSE describes and documents the affective dimension of cognitive achievement or concerns of a student, curriculum or approach to learning. It can document, describe and evaluate:

a) Teaching Practices
b) Teaching Environment
c) Teaching Methods
d) Teaching Personalities
e) Teaching Experiences

3) PROSE provides weekly information feedback that can help to alter or reinforce practices, methods or directions most conducive to the goals of the program.

This objective monitoring feature of PROSE represents a "break-through" in the field of testing.

4) PROSE gives new meaning, depth and value to the standardized testing instruments:

PROSE compliments the use of standardized cognitive and affective instruments by aiding them to more fully describe, document and evaluate the affective experience buttressing and articulating the cognitive accomplishments.

5) PROSE provides the "institution" with a most effective means by which each students' concerns and needs can be objectively monitored, evaluated and effectively accommodated.

6) The raw data collected by PROSE is free from institutional or instrumental restrictinos and inhibitions:

The data represents the students' own "free" reaction and perception of experience;

PROSE filters the raw data through any content category considered appropriate to the situation being evaluated. Unsuspected content categories usually emerge from the students' concerns and perspectives. These and other emerging questions can be accommodated by the mechanism of PROSE.

7) The resultant evaluation of the individual and/or total subjective experience can be made to accommodate various degrees of precise measurement.

EDUCATIONAL EVALUATION ▪ RESEARCH ▪ DEVELOPMENT

# THE PROSE JOURNAL
# FOURTH WEEK PROGRESS REPORT FOR THE "SELECTED CLASSROOMS RESEARCH PROJECT"
# -PROJECT COD-

## Preliminary "Monitoring Function" Summary

The following preliminary summary is based on monitoring PROSE journals from 19 cooperating teachers during the first four weeks of Project COD's Selected Classrooms Research Project.

This report represents only the concurrent monitoring function of PROSE and is not to be construed as a final analysis. Such an analysis will be provided in a final report. These progress reports will appear regularly throughout the program and will culminate in an intensive report of the affective dimension of the project.

HEURISTICS INC.

## I. GENERAL OBSERVATIONS:

At this point it appears that the Selected Classrooms Project is on the road to achieving its goals. Almost all the teachers are very appreciative of the help and direction afforded them by Project COD. In most cases, the teaching-learning environment has been drastically altered in terms of the role of the teacher, the role of the student, the orientation to materials and teacher-directed activities.

There is a new realization and appreciation of the uniqueness of each student, of the ability of most students to "chart their own directions" and of the amount of involvement and learning that this individual approach nurtures.

There is a new excitement about the learning-teaching process afforded by the philosophy that buttresses Project COD. Many of the teachers have developed a new awareness of how the "individualized" approach of Project COD enhances the interest, involvement and learning factors of each student. Their classrooms (and schools) seem to have become places that both teachers and students truly enjoy. Although some teachers report being "exhausted" because of the new demands and roles, they also report being ecstatic about their newly found opportunity to get to know and appreciate each individual student on other bases than just ability, discipline or achievement.



886 WASHINGTON STREET ▪ DEDHAM, MASSACHUSETTS 02026 ▪ (617) 326-2818

II. PROBLEM AREAS:

Some of the problems that are beginning to arise seem to be the direct result of the success of the program. Many of these problems center around content and skill acquisition concerns. Many teachers express some anxiety about not knowing what to do next -- a genuine reflection of the changed role of the teacher.

Almost eavery teacher has reported some frustration and exhaustion that is a concomitant of this kind of approach. Many are asking for more help in terms of assistance and direction. Two teachers appear to be going back to a greater reliance on teacher-directed activity.

Some teachers are expressing impatience over the time that it is taking some student to learn to chart "worth-while" goals and to rely on their own interest and motivating factors. This concern speaks directly to the new anxieties created by the changed role of the student. Although some teachers are wondering if this approach is valid for all students, most are reporting the "thrill" of seeing formerly non-motivated students "come alive".

Five teachers have expressed concern over the value of PROSE as it relates to the Selected Classrooms Project. They were apparently misinformed as to the uniqueness of the instrument and to the way in which it works. We have attempted to correct this misinformation through a letter to the teachers informing them of the high value of their cooperation and contributions to this evaluative dimension of the Project.

In some schools there seems to be discussion of the comments that the teachers make in their PROSE journals. This gossip could be detrimental to the sensitivity of PROSE. In order to insure that each reaction or feeling is the person's own and not influenced by peers, we will again ask each teacher to cooperate in this respect. (This is not to indicate that the SCP teachers are not cooperating; it is indicative of faulty initial orientation as to the value, purpose and operational factors of the instrument.) The cooperation and contributions of the SCP teachers is of a high quality and of the kind one would expect from people who are genuinely interested in innovation and experimentation.

III. CURRICULUM CONCERNS:

The process of individualizing, math and science have been the major concerns of the project up to now. There has been no mention of integrative activities in terms of subject areas. The use of literature, art, drama, and music (etc.) is either non-existant or of little value to the project.

IV. PROJECT COD PERSONNEL:

Appreciation for the help of the Project COD personnel is much in evidence. Thus far, this factor seems to have contributed greatly to the current success of the program.

# P R O S E EVALUATION

of the

Selected Classrooms Project

of

PROJECT COD

HEURISTICS, INC.
850 Providence Highway
Dedham
Massachusetts

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# P R O S E EVALUATION

of the

Selected Classrooms Project

of PROJECT COD

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HEURISTICS, INC.

## I. SOURCES OF DATA

### A. Sample

The "Selected Classrooms Project" of PROJECT COD involved 20 teachers. Of these, 19 volunteered to be subjects of a fifteen-week PROSE evaluation of affective-domain outcomes.

### B. Response

Full response involved returning fifteen weekly issues of a daily diary, The PROSE Daily Journal (by Ronald P. Dutton, Ed.D. and J. Jack Manuel, D.M.A.), for content analysis. Ten of the teachers responded at the maximum rate (see Table 1).

Six teachers dropped out relatively early in the

TABLE 1

PROSE Journals Returned
f, Σ, %

| Response (Weekly Issues) | f | Σ | % |
|---|---|---|---|
| 1 | 0 | 0 | 0 |
| 2 | 1 | 2 | 5 |
| 3 | 5 | 15 | 26 |
| 4 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 |
| 6 | 1 | 6 | 5 |
| 7 | 1 | 7 | 5 |
| 8 | 1 | 8 | 5 |
| 9 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 |
| 12 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 |
| 14 | 0 | 0 | 0 |
| 15 | 10 | 150 | 53 |
| Σ | 19 | 188 | 99 |

study, probably in part because the usual PROSE instructions were administered individually and orally (rather than in group and written form). Content analysis indicates that some of these subjects had an inappropriate set toward the task, and anticipated feedback of a nature alien to the customary use of the instrument. These subjects experienced an unanticipated form of frustration with the evaluation which could not be met in full by means of feedback comments.

In all, the evaluation is based on the objective scoring of 188 Journals.

C. Instrumentation

The Journal (Personal Reports of Subjective Experiences) is an inoffensive daily "diary" in which subjects write relatively-unstructured affective reactions to their daily lives (both as teachers and as inidividuals).

The instrument is designed to measure both humanistic experience (i.e., subjective experiences of the affective domain) and to document and describe the quality and quantity of that experience. The system of content-analysis based on the PROSE is unique in educational and psychological measurement, and particularly suited to the evaluation of efforts such as the Selected Classrooms Project.

Operationally, each subject returns the PROSE Journal each week by mail to Heuristics, Inc. in order to obtain motivational feedback from his reader by means of occasional notes (and, of course, for scoring). The subjects are not informed about the particular topics being scored.

Subject confidentiality is protected through an elaborate system of code-names, the identification of data by subject-number, and the disguising of quotations used in the report.

D. Selection of "Quotations" to Score

The first step in the content analysis of PROSE data is the selection from the Journals of "quotations" appearing to have some bearing on the custom-designed SPC evaluation topics ("Content Categories"). The Content Categories used were not, of course, known by the subjects.

The SPC Journals yielded 475 relevant Quotations (Table 2).

In addition, quotations were selected in three other areas of interest to Heuristics, Inc. which bear on the instrumentation itself. (These are not reported herein.) Results in these areas suggest that the selection of quotations was relatively stringent (and that therefore some small amount of useful data may have been "left" in

TABLE 2

Quotations Selected for Scoring

$\Sigma$, $\overline{X}$

| | |
|---|---|
| N | 19 |
| $\Sigma$ Quotations | 475 |
| $\overline{X}$ | 25.0 |

TABLE 3

Scored Statements

$\Sigma$, $\overline{X}$

| | |
|---|---|
| N | 19 |
| $\Sigma$ Statements | 640 |
| $\overline{X}$ | 33.7 |

3.163

the Journals).

In order to furnish some "flavor" of the comments volunteered in the PROSE Journals, this report includes a number of actual quotations. By examining these glimpses of the raw data, one can become immersed in the affective impact of the SCP in the affective domain. (Each quotation has been edited to protect the anonymity of the writer by changing names and other identifying information.)

The scorer sees the Quotations transcribed on edge-punched cards and does not know the meaning of the grooves (edge-punches) which identify the subject by number, the issue of the Journal, and the like.

Although no data can be furnished on this evaluation in regard to inter-quotation-selection reliability, the three additional Content Categories suggest that the choice of quotations was satisfactory.

E. Scoring of "Statement" Units

The scorer studies the Quotation on each card and breaks it down into "Statement" units that can stand alone as reactions to or comments on one of the topics pertinent to the evaluation. (The scorer follows a Heuristics, Inc. manual in this and successive stages to facilitate reliability.)

The scoring of the SCP data was based on these more precise units (rather than on the Quotations selected originally from the raw data). In a previous study, the reliability between three scorers paired against each other (on 250 quotations) showed complete agreement on 1) Content Categories, 2) Statement units, and 3) affect ratings 85, 82, and 85 per cent of the time.

The SCP teachers average about 34 Statements each (Table 3); in all, they furnished 640 Statements.

Using Statements as the unit of analysis gains 165 scoring units (Table 4). The SCP teachers would seem to have communicated at a level of complexity comparable to that found in graduate students at Harvard University -- who also averaged 1.4 Statements per Quotation.

The distribution of Statements-per-subject is set forth in Table 5.

F. Scoring of Content Categories

The scorer assigns each Statement to one of a number of mutually-exclusive Content Categories (topics), such as "Affective Reactions to Project COD Staff." Each category is defined below.

Table 6 indicates the placement of Statements in Content Categories by sex. Although the female teachers furnished more Statements (8 volunteering 374, for an average of 47, while the males averaged 24), statistical

TABLE 4

Statement Scoring Gain

$\overline{X}$, %

| | |
|---|---|
| Σ Quotations | 475 |
| Σ Statements | 640 |
| Gain | 165 |
| $\overline{X}$ | 1.4 |
| % | 34.7 |

TABLE 5

Statements per Subject

Σ, f, %

| Σ | f | % |
|---|---|---|
| 90 - 100 | 1 | 5 |
| 80 - 89 | 0 | 0 |
| 70 - 79 | 1 | 5 |
| 60 - 69 | 2 | 11 |
| 50 - 59 | 1 | 5 |
| 40 - 49 | 3 | 16 |
| 30 - 39 | 3 | 16 |
| 20 - 29 | 1 | 5 |
| 10 - 19 | 1 | 5 |
| 0 - 9 | 6 | 32 |
| Σ | 19 | 100 |

TABLE 6

Content Categories of Scored Statements by Sex
f, Σ, $\overline{X}$

| Content Category | Male f | Female f | Σ |
|---|---|---|---|
| N | 11 | 8 | 19 |
| COD Staff | 17 | 19 | 36 |
| COD Program | 54 | 48 | 102 |
| COD Workshops | 3 | 23 | 26 |
| Teacher's Role | 55 | 89 | 144 |
| Students' Roles | 81 | 105 | 186 |
| Instructional Innovation | 20 | 37 | 57 |
| Curriculum | 24 | 33 | 57 |
| Professional Colleagues | 12 | 20 | 32 |
| Σ | 266 | 374 | 640 |
| $\overline{X}$ | 24.2 | 46.8 | |

tests (nonparametric for independent samples) indicate no significant differences by sex; the sex breakdowns are reported in the tables as a matter of interest.

G. Scoring of Affect-ratings

Each Statement is scored according to a complex content-analysis scheme to indicate its emotional tone. Briefly, the scoring can be thought of as running from approving, optimistic, and happy down to disapproving, pessimistic, and depressed. (The affect scoring takes other affective dimensions into account also.)

In order to make the affect scores more easily understood, the PROSE scores have been transformed into familiar "school grades." Going up from 60 to 100, the higher the score, the more positive the affective reaction; scores below 60 indicate negative reactions, broadly defined. Naturally, in any challenging research design -- such as the SCP -- the mean scores are depressed by frustration at not meeting idealistic goals. For this reason, scores high in the official "negative" range, such as 50 or 55, must be considered as satisfactory, and scores in the 60's as good. (Naturally, should higher mean scores occur -- in the 70's, for example -- they must be interpreted as very good.)

## II. CONTENT CATEGORIES

A. Over-view of SCP "Content Categories"

The custom-designed topics for the evaluation were selected by the staff of PROJECT COD in consultation with representatives of Heuristics, Inc. In brief, the Content Categories (in addition to the three in-house categories) were as follows.

"COD Staff" -- Larry Cornell, Gerry Johnson, and Bill Page.

"COD Program" in general -- as distinct from the following Content Categories (as explained below).

"COD Workshops and Meetings".

"Teacher's Role" and role evolution.

"Students' Roles".

"Specific Innovational Instructional Techniques."

"Curriculum Areas."

"Intra-professional Relationships with Colleagues."

## III. COD STAFF

This Content Category included affective reactions to and effect of the COD program as experienced in relations with the three members of the COD staff.

The very high mean affect scores in this area (Table 7) indicate that the staff made very positive contributions to

TABLE 7

"COD Staff" Affective Reactions by Sex
Range, $\bar{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 7 | 6 | 13 |
| N Statements | 17 | 19 | 36 |
| Affect Range | 20 - 100 | 52 - 100 | |
| $\bar{X}$ | 84.8 | 80.4 | 82.8 |
| SD | 27.5 | 18.5 | 24.9 |

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the teachers' affective reactions to being a part of PROJECT COD. The teachers did not differ significantly by sex in their reactions to the COD staff (Table 8), although it is of interest that there was a non-significant tendency for the male teachers to respond more favorably than the females (which tends not to be true of other topics). In view of stereotypes of male relationships to males in superior positions, this finding is rather surprising, and a source of commendation for the COD staff.

The range of affective-domain responses to the COD staff is suggested by the following Quotations from the PROSE Journals. Clearly, the COD staff contributed much psychological and physical support to the teachers. The COD staff were almost always available when needed; they helped to develop and shared ideas which emerged from the various teachers; they articulated the direction and supplied the support prerequisite to the success of the project. The comments volunteered in the Journals give clear evidence that the PROJECT COD staff were exceptionally effective in the performance of their functions.

> "I can't help but admire the people from COD. Their interest in me as a person and as a teacher...really makes me feel good. I feel like a student who has a crush on a teacher. You want to be like them, you can't help it. I think I envy their dedication because I'm not sure I could ever be totally as committed as they seem to be."

TABLE 8

"COD Staff" Affect Scores by Sex
f, Σ, %

| $\bar{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 7 | 6 | 13 | |
| 90 - 100 | 5 | 2 | 7 | 54 |
| 80 - 89 | 0 | 2 | 2 | 15 |
| 70 - 79 | 1 | 0 | 1 | 8 |
| 60 - 69 | 0 | 1 | 1 | 8 |
| 50 - 59 | 0 | 1 | 1 | 8 |
| 40 - 49 | 0 | 0 | 0 | 0 |
| 30 - 39 | 0 | 0 | 0 | 0 |
| 20 - 29 | 1 | 0 | 1 | 8 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

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"This week [a COD staff member] and I worked on a special show for the kids which we hope will help them think of some 'groovy' activities. [He] also came in twice this week to see if he could help in any way. They are always there when you need them."

"[A COD staff member] attempted to help me keep my sanity. He came in twice this week to help and encourage me. I really needed him."

"In my darkest hour since I started in the program COD was there to give me the reassurance that all is worthwhile.... COD is always there when you need them."

"COD provided me with a survival kit this week.... I wanted to call [a member of the COD staff] Monday P.M. but.... So the encouragement recieved Tues. and Fri. by his visits can't be measured. [He] was tremendous.... My 'teacher-aide' (a gift from Heaven and COD) is a wonderful asset.... Thank God for COD."

## IV. COD PROGRAM

This Content Category included statements volunteered about the specific affect and effect of the COD program that did not fall into any other Content Category. This category included development of program philosophy, of self as a person through involvement with Project COD, time and program oriented frustrations, and field trips.

There was a tendency for woman teachers to react more favorably in this area (Table 9) (but the difference was not statistically significant). The affect scores are distributed widely (Table 10).

TABLE 9

"COD Program" Affective Reactions by Sex
Range, $\bar{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 11 | 7 | 18 |
| N Statements | 54 | 48 | 102 |
| Affect Range | 20 - 93 | 47 - 95 | |
| $\bar{X}$ | 59.4 | 70.6 | 63.7 |
| SD | 27.0 | 14.4 | 24.3 |

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TABLE 10

"COD Program" Affect Scores by Sex

f, Σ, %

| $\bar{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 11 | 7 | 18 | |
| 90 - 100 | 1 | 1 | 2 | 11 |
| 80 - 89 | 1 | 3 | 4 | 22 |
| 70 - 79 | 1 | 1 | 2 | 11 |
| 60 - 69 | 3 | 1 | 4 | 22 |
| 50 - 59 | 0 | 0 | 0 | 0 |
| 40 - 49 | 2 | 1 | 3 | 17 |
| 30 - 39 | 0 | 0 | 0 | 0 |
| 20 - 29 | 3 | 0 | 3 | 17 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

A quotation of general reaction to "COD Program" follows.

> "Basic feelings of insecurity seemed to be involved with what came to be a large-scale or a series of innovations that came along with COD and SCP. These feelings seem to be at the root of the initial feelings of defensiveness and frustration about this program.... However, some of the reasons for the change [in my attitude] are: 1) an increased sense of self-value brought on by involvement in this project; 2) successful encounters with irate parents, and 3) the intercourse with other schools that are a result of this project."

Many quotations indicated frustration (and, of course, depressed the mean scores). Frustration colored the most positive as well as the most negative Statements.

> "This project has kept me awake trying to think of ideas.... It would be physically and mentally impossible to do everything I'd like to do."

> "I guess that the most important by-product of this project will be the conflict of ideas that I find continually assailing me. I find the student-motivated aspect great and stimulating, but I do think there are some time-saving valuable aspects to be found in the more traditional approaches."

> "I'm terribly frustrated with everything. I know I'm going to make quite a few changes in the curriculum.... I think I've gone too far toward the personalism and failed in regard to knowledge."

> "The frustration seems to be getting unbearable. Right now I am <u>frustrated</u>! ...I feel that COD has led me to a very difficult situation ...[and] I am not too sure how I will handle the future of this program in my classroom."

> "The way I feel today I wish COD had never entered my life. The hang-ups I am having with the coverage of the basic skills are very discouraging."

> "I have never felt lower in my life. I am questioning my ability to function under this type of set-up.... I [think I will] return to the old ways (i.e., traditional)...I couldn't take all those suffering faces staring at me again."

The Journal comments suggest that one of the most valuable aspects of the program was the field trips. A number of teachers reported that the field trips were supporting, encouraging, and enlightening. The field trips appeared to be a significant source of new ideas, renewed enthusiasm, and heightened commitment to the project.

> "Before going [on a field trip] I knew that if the trip didn't give me hope I planned to return to the single concept of the classroom. Now I have the necessary hope.... It can be done. But can we do it with the teachers and facilities we now have?"

> "Today was a fantastic day. We visited [another Project COD] class. It's really helpful to see how effective this type of classroom us. This is what I am aiming for."

Clinical analysis indicated that those who were disenchanted with the COD program were much less likely to mention field trips.

> "From my other observations of classrooms and conferences with other COD teachers, I do not feel that this project has done anything significant for me outside of giving me the opportunity to do my own thing without repercussion from the administration. When I was selected for this program, I was about 75% of the way on the road to COD goals anyway."

## V. COD WORKSHOPS

This category concerned the affective reactions to workshops and meetings. Such experiences were of two kinds: structured experiences designed to stimulate ideas, approaches, and materials for "content," and relatively-unstructured meetings at which each teacher was free to "do his own thing," discuss mutual problems, and share ideas.

Female teachers tended to be positive in this area (but do not differ from males to a statistically-significant extent); see Table 11. Table 12 sets forth the affect scores in detail.

It is perhaps significant that the workshops often took place before a weekend or vacation, which may have reduced the frequency of comments on this topic.

The indications are that the workshops were very successful in stimulating new ideas and directions, in sharing problems and comradeship, and in giving and reinforcing sorely-needed direction.

> "Thoroughly fortified by the COD workshop, school was wonderful today.... We can really use some of the ideas."

> "What a gorgeous experience trying out the broadening idea that was used at the COD workshop. ... The kids loved every minute of it and wanted to do more."

TABLE 11

"COD Workshops" Affective Reactions by Sex
Range, $\bar{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 2 | 6 | 8 |
| N Statements | 3 | 23 | 26 |
| Affect Range | 60 - 60 | 20 - 100 | |
| $\bar{X}$ | 60 | 82.5 | 76.9 |
| SD | 0 | 28.6 | 28.5 |

TABLE 12

"COD Workshops" Affect Scores by Sex
f, Σ, %

| $\overline{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 2 | 6 | 8 | |
| 90 - 100 | 0 | 4 | 4 | 50 |
| 80 - 89 | 0 | 1 | 1 | 13 |
| 70 - 79 | 0 | 0 | 0 | 0 |
| 60 - 69 | 2 | 0 | 2 | 25 |
| 50 - 59 | 0 | 0 | 0 | 0 |
| 40 - 49 | 0 | 0 | 0 | 0 |
| 30 - 39 | 0 | 0 | 0 | 0 |
| 20 - 29 | 0 | 1 | 1 | 13 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

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## VI. TEACHER'S ROLE

Statements scored in this Content Category had to do with changes in the role of the teacher concurrent with involvement in the SCP. Some statements scored here were very introspective; some reflected considerable anxiety (with a resulting depressing effect on the affect scores).

This Content Category had a relatively large number of statements -- 144. (Table 13.)

Many statements were affectively toned with feelings of frustration and exhaustion (which would seem to be a natural concomitant of involvement with a demanding project). In spite of this influence, the affect scores are high (Table 14). Clinical inspection of the data suggests that the high scores may be attributed, in part, to teachers' feelings of gratification and welcome of changes in role.

> "This project is forcing me to re-evaluate my role as a teacher. It seems to be less important for me to know all of the answers than to be able to guide the students to find the answers themselves."

> "I feel as though I am ready to honestly redefine my role in the classroom.... I now feel differently not only about my role as a teacher, but more personally, I feel differently about me."

> "I am enlarging my idea of what being a teacher can mean....recognizing process and goals and enjoying the process is...important."

> "I tried teaching a fifth grade from the book today.... It now seems like...masochism."

TABLE 13

"Teacher's Role" Affective Reactions by Sex
Range, $\bar{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 9 | 6 | 15 |
| N Statements | 55 | 89 | 144 |
| Affect Range | 20 - 100 | 51 - 99 | |
| $\bar{X}$ | 72.0 | 73.3 | 72.6 |
| SD | 23.4 | 15.1 | 21.2 |

TABLE 14

"Teacher's Role" Affect Scores by Sex
f, Σ, %

| $\bar{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 9 | 6 | 15 | |
| 90 - 100 | 4 | 1 | 5 | 33 |
| 80 - 89 | 0 | 2 | 2 | 13 |
| 70 - 79 | 1 | 0 | 1 | 7 |
| 60 - 69 | 1 | 2 | 3 | 20 |
| 50 - 59 | 1 | 0 | 1 | 7 |
| 40 - 49 | 1 | 0 | 1 | 7 |
| 30 - 39 | 0 | 0 | 0 | 0 |
| 20 - 29 | 1 | 1 | 2 | 13 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

"I didn't realize how much I used to distrust the students or myself. Under this program, they are functioning better than I."

"This week's activities have affected me adversely as a teacher. I'm discouraged, tired, and not too anxious to talk. I don't ever remember experiencing such intense frustration in my years of teaching as I have this year. Of course, I've never experienced this level of satisfaction and happiness when the children are accomplishing successfully."

Many teachers pleaded for aides to assist them in coping with their difficult role demands -- and when the project supplied aides for some of them, their gratitude was enormous.

## VII. STUDENTS' ROLES

This Content Category concerned the teachers' perceptions of students' roles (and the teachers' reactions in the affective domain to changes in those roles). The scoring included Statements regarding motivation, discipline, self-direction, interest, involvement, and achievement.

The statistical results appear to be colored by an "inverse" negativism -- the teachers tended to be dissatisfied by traditional student roles, with a resulting depressing effect on the affect scores (Tables 15 and 16). This category drew the largest number of statements -- 186.

TABLE 15

"Students' Roles" Affective Reactions by Sex
Range, $\overline{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 9 | 8 | 17 |
| N Statements | 81 | 105 | 186 |
| Affect Range | 20 - 88 | 20 - 87 | |
| $\overline{X}$ | 62.1 | 63.4 | 62.8 |
| SD | 20.4 | 19.2 | 20.5 |

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TABLE 16

"Students' Roles" Affect Scores by Sex

f, Σ, %

| $\bar{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 9 | 8 | 17 | |
| 90 - 100 | 1 | 0 | 1 | 6 |
| 80 - 89 | 1 | 2 | 3 | 18 |
| 70 - 79 | 2 | 1 | 3 | 18 |
| 60 - 69 | 2 | 3 | 5 | 29 |
| 50 - 59 | 0 | 1 | 1 | 6 |
| 40 - 49 | 2 | 0 | 2 | 12 |
| 30 - 39 | 0 | 0 | 0 | 0 |
| 20 - 29 | 1 | 1 | 2 | 12 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

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Clinical examination suggests that the main reason why this category drew so many Statements is that the students were, after all, the central concern of all the professionals involved in the project. The process of individualizing education was found to be fraught with frustration -- for now every child's weakness, strengths, interests, study habits, attitudes toward learning, etc. were being confronted in a straightforward manner.

Individualized learning experiences appeared to hinge on the students' interests.

> "Two of my girls completed a project on distillation with no help from me. You must understand these kids couldn't even spell 'distillation' let alone distill some water.... If you could have seen the looks on their faces it was worth being a part of this project."

The PROSE Journals lend themselves to a panoramic, or chronological, view of the process of changes taking place over time in the affective domain. Changes in the teachers' perceptions of students' roles are particularly interesting when seen from such a perspective.

Week 1

> "The children are bringing in more materials from home. The projects are beginning to take on the role of the most important part of the day.... Many of the students used free time...to work on their goals today. Their interest is certainly evident."

Week 4

"There are no more discipline problems. I rarely have to get after individuals. Each is doing what he is able to do and is enjoying it."

Week 5

"An increasing number of students are weighing the value of what they intended to do. [They want] to see whether these activities are really worthwhile."

Week 6

"Probably my greatest reward this week was the fact that self-discipline [is being learned]. Because they have so much freedom, they have a new attitude towards school and teacher."

Week 7

"What pleases me is the interest that the students who have usually had little interest in reading before now have."

Week 12

"Kids don't want to see movies any more -- they resent time taken from projects."

Week 15

"My students...who are reading two years below grade level, weren't capable of passing tests. Failure after failure. Now that they are successful in each thing they do...I can see the enthusiasm for learning grow. Some even say they like school 'as long as we can do projects'."

Another area of teachers' concerns about students' roles concerned ways of coping effectively with lack of interest and involvement -- that is, with responsibility and discipline.

Many years of traditional teaching appeared to have conditioned the students to kinds of behavior antithetical to the growth goals of Project COD. In order to make the learning process student-directed, relevant, and exciting, enormous demands were made (implicity and sometimes explicitly) of the teachers. Also, some of the classrooms were compartmentalized anyway, and only allowed students to pursue their individual interests and involvements during one or two periods a day.

Clinical examination suggests that many students found their changed role exhilarating. (It would be of interest to compare students' affective reactions with those of control groups in more traditional classrooms.)

Some problems appeared "between" projects. A few students found it very difficult to give up seeking the customary acceptance, rather than independence. Such students were described in the Journals as unable to find meaning in "doing their own thing."

Week 1

> "When I had to leave the room all hell broke loose. I feel that the students who are used to an overwhelming authoritarian discipline felt the lack of it."

Week 2

> "This week students seemed not so interested. No conception of time to finish their projects. The unorganized structure of the COD

approach seemed to make me unorganized. I find that students cannot be left on their own."

Week 3

"Great! Apparently some are using their projects as an excuse to get out of any and all classes! ...They associate school with books, not people or places."

Week 4

"Non-readers are very discouraged. Research material is very limited for them."

Week 5

"The children need some structure so they don't get bogged down in one thing, and so they don't get bored. When I provide my 'poorer' students with material, they do beautifully. When I don't..."

Week 6

(Vacation.)

Week 8

"I feel that I really have to have a closer relationship with each child to fulfill my goal of responsibility. But, shouldn't they have responsibility to people and to things they do not relate to?"

Week 11

"One of my groups has a terrible time adjusting to any responsibility.... It was hard."

Week 13

"I had to blast my 'charmers' again for their behavior yesterday toward my substitute. It's incredible how they revert back to primitivism."

Week 15

"When the children are working, they are fine. When they have been working...too long, they have problems with self-discipline.... We are really providing them with a base for self-direction."

The teachers chose to comment rather often on their concerns about the students' involvement and self-direction.

Week 1

"I am discouraged. I do not have any varied activities going on. Too tied to books.... I need more resources, ideas, and activities."

Week 2

"We are beginning to 'crack down' on those that are doing nothing."

Week 3

"One difficulty I see is the lack of continuity in projects. I question how ready these classrooms will be for next year.... The classes I have find it hard to be curious, tend to copy each other's ideas, and are content just to 'vegetate.' I find it discouraging, yet I continue to be hopeful."

Week 4

"The children are restless and not concentrating on their work too much. There is a lack of interest developing, a lot of talking and fooling. Few are working on projects -- many doing little or nothing."

Week 5

"It is becoming more and more apparent that the projects of the students lack depth. Understanding also is superficial."

Week 6

"It irks me, though, to see some of the students spending valuable time on activities that are ' fun' but do not really seem worthwhile.... This may be my problem and not theirs."

Week 12

"These children need much more direction than we have planned, [but] we have no planning time--. Frustration! ...I feel I am pulling 20 different ways."

Week 13

"My students don't seem to have the ability to grasp the concept of the program, and the few who do cannot follow through."

Week 14 "The students often don't show any maturity or even an increase in maturity.... They are still rude at times, immature and noisey."

And finally, some more positive comments.

"Today the class was really working on their own. They could very easily have gotten along without me."

"I am encouraged by the fact that over vacation quite a few students actually took time to think up new projects!"

"The substitute...was very enthusiastic. She couldn't get over how responsible the kids were."

## VIII. INSTRUCTIONAL INNOVATION

Statements scored in this Content Category tended to be based on the students' interests as expressed in goal-setting and in their pursuit of projects. Some of the comments had to do with making goals explicit, using

flow charts to record progress, and brainstorming. A few statements concerned the use of puppet shows, drama, sound tapes, and video tapes. A few comments were in the area of visual literacy, and concerned the use of still and motion pictures, comic strips, and the like.

Those teachers who chose to volunteer comments on innovative instructional techniques tended to be positive (Table 17). Indeed, both male and female teachers were clearly approving in their attitudes (Table 18).

> "The Progress Sheet provided by COD will enable me to see at a glance what goals (if any) are being accomplished, and how relevant they might be."
>
> "We have created a 'swap shop' board where kids put down what they need in case another student can help them.... [There is a] genuine interest in sharing that really touches me."
>
> "Drama really changes some of the students. My children are really excited about the play this week. They are shining on stage."
>
> "Spent the afternoon taking pictures and having the students write captions explaining their activities."
>
> "It seems important to build up a picture file and other material for the poor readers."
>
> "The kids [built]...a meditation room. This study-house has carpets, curtains, and light.... They love it."
>
> "The students had to sell a product.... One girl was selling her five brothers. She got one [of them up] from the first grade to demonstrate. She sold all five."

TABLE 17

"Instructional Innovation"
Affective Reactions by Sex

Range, $\overline{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 8 | 6 | 14 |
| N Statements | 20 | 37 | 57 |
| Affect Range | 20 - 100 | 85 - 97 | |
| $\overline{X}$ | 82.7 | 92.6 | 86.9 |
| SD | 24.4 | 4.9 | 20.1 |

TABLE 18

"Instructional Innovation"
Affect Scores by Sex

f, Σ, %

| $\bar{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 8 | 6 | 14 | |
| 90 - 100 | 4 | 5 | 9 | 64 |
| 80 - 89 | 3 | 1 | 4 | 29 |
| 70 - 79 | 0 | 0 | 0 | 0 |
| 60 - 69 | 0 | 0 | 0 | 0 |
| 50 - 59 | 0 | 0 | 0 | 0 |
| 40 - 49 | 0 | 0 | 0 | 0 |
| 30 - 39 | 0 | 0 | 0 | 0 |
| 20 - 29 | 1 | 0 | 1 | 7 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

## IX. CURRICULUM

Statements scored in this Content Category had to do with areas of instruction and the relationships (or lack of them) between areas. In understanding Tables 19 and 20, it is important to bear in mind that the very nature of the SCP worked against positively-toned reactions in this area. Integrating various subject areas proved difficult, and managing "multi-activities" (several areas going on concurrently) even more so. In other words, some "negative" statements in this Content Category were really positive in that they described difficulties and frustrations attendant on striving to meet the goals of the project.

The 57 statements in this area concerned:

1) curriculum areas as such (language arts, science, art, mathematics, etc.);

2) integration of two or more curriculum areas (math and history, art and poetry, etc.); and

3) multi-activities going on simultaneously, but in an individualized manner.

Individual curriculum areas mentioned in the Journals included art, biology, anthropology, creative writing, drama, music, literature, and social studies.

A number of integral concerns emerged during the project and appeared to satisfy both teachers and students.

TABLE 19

"Curriculum" Affective Reactions by Sex
Range, $\bar{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 8 | 6 | 14 |
| N Statements | 24 | 33 | 57 |
| Affect Range | 20 - 100 | 40 - 96 | |
| $\bar{X}$ | 68.6 | 70.6 | 69.5 |
| SD | 30.8 | 16.8 | 26.3 |

TABLE 20

"Curriculum" Affect Scores by Sex
f, Σ, %

| $\bar{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 8 | 6 | 14 | |
| 90 - 100 | 2 | 1 | 3 | 21 |
| 80 - 89 | 2 | 0 | 2 | 14 |
| 70 - 79 | 1 | 3 | 4 | 29 |
| 60 - 69 | 1 | 1 | 2 | 14 |
| 50 - 59 | 0 | 0 | 0 | 0 |
| 40 - 49 | 0 | 1 | 1 | 7 |
| 30 - 39 | 0 | 0 | 0 | 0 |
| 20 - 29 | 2 | 0 | 2 | 14 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

## X. PROFESSIONAL COLLEAGUES

Relationships with peers were scored in this Content Category. The statistical findings (Tables 21 and 22) reflect the fact that the Project COD innovations were sometimes threatening to the teacher "down the hall." On the other hand, the project appears to have been viewed sympathetically and constructively by the school administrators who came in contact with it.

> "I am disturbed about the static we are receiving from certain teachers in the building who do not approve of this project. They... are unwilling to accept change. I am grateful for the static in a way -- it makes me appreciate even more how valuable this project has been for me, not only for the kids' sake, but for making me open up my thinking on education."

> "Many of the more traditional teachers are just waiting for us to fail."

And finally, a PROSE Journal quotation worthy of giving pause to all those who presume to evaluate innovative approaches in education:

> "The Superintendent of Schools has O.K.'d the visits of any interested teachers in the system during school hours. This is quite a thing! He must really like what he sees. I'm sure this program won't fade into the dust at the end of the project."

TABLE 21

"Professional Colleagues"
Affective Reactions by Sex

Range, $\bar{X}$, SD

| | Male f | Female f | Σ |
|---|---|---|---|
| N | 6 | 7 | 13 |
| N Statements | 12 | 20 | 32 |
| Affect Range | 20 - 100 | 20 - 100 | |
| $\bar{X}$ | 65.5 | 51.6 | 58.0 |
| SD | 31.3 | 25.4 | 30.3 |

TABLE 22

"Professional Colleagues"
Affect Scores by Sex

f, Σ, %

| $\overline{X}$ Score | Male f | Female f | Σ | % |
|---|---|---|---|---|
| N | 6 | 7 | 13 | |
| 90 - 100 | 2 | 1 | 3 | 23 |
| 80 - 89 | 1 | 0 | 1 | 8 |
| 70 - 79 | 0 | 0 | 0 | 0 |
| 60 - 69 | 0 | 2 | 2 | 15 |
| 50 - 59 | 1 | 1 | 2 | 15 |
| 40 - 49 | 0 | 1 | 1 | 8 |
| 30 - 39 | 1 | 0 | 1 | 8 |
| 20 - 29 | 1 | 2 | 3 | 23 |
| 10 - 19 | 0 | 0 | 0 | 0 |
| 0 - 9 | 0 | 0 | 0 | 0 |

## XI. CONCLUSION

The data interpreted clinically and evaluated statistically from 188 copies of The PROSE Daily Journal -- which yielded 640 scored statements -- suggest that the Selected Classrooms Project of PROJECT COD was, in varying degrees, a considerable success.

The staff of the project are to be commended for their commitment, effectiveness, and leadership in meeting the goals of the project, and in particular, for facilitating the movement of a number of teachers from traditional subject-matter-oriented classes to education based on meeting the current interests and needs of their students.

Were the project to be repeated, it would be helpful to have more teacher aides (to free more time for planning), and to establish a more efficient system for the exchange of information about innovative instructional techniques.

The PROSE evaluation suggests that the teachers involved showed a strong tendency toward enlightened views of their own and their students' roles, and that their reactions in the affective domain to these changes made a stimulating and worthwhile contribution to the educational process.

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# Appendix I

## Classroom Observation Checklists

PROJECT COD
ESEA Title III

# SELECTED CLASSROOM PROJECT

## CLASSROOM OBSERVATION CHECKLISTS

Teacher _____

School _____

Subject _____

Grade _____

Date _____

Observer _____

Number of Students _____

Number of Teachers _____

Packet No. _____

## DIRECTIONS TO THE OBSERVER

Observe each classroom for 34 minutes, divided into three four-minute intervals for teacher observation, two four-minute observation periods for student activity (see chart), and ten minutes for other data collection.

STEP

1) For the first four minutes, use the TEACHER BEHAVIOR CHECKLIST. Put an X beside each behavior the teacher does, one X for each time she does that behavior during the four minute interval. Use line 1 beside each behavior for recording these X's for the first four minutes.

2) For the first two minutes, use the STUDENT BEHAVIOR CHECKLIST "A". Look up at the classroom and, starting with the first behavior listed below, write beside each behavior in column 1 the number of students who are doing that behavior.

3) For the second two-minute interval repeat 2) above using CHECKLIST B.

4) For the second four-minute interval repeat 1) above using column 2.

5) For the third two-minute interval repeat 2) above using line 2. (CHECKLIST A)

6) For the fourth two-minute interval repeat 2) above using column 2. (CHECKLIST B)

7) For the third four-minute interval repeat 1) above using column 3.

8) For the fifth two-minute interval repeat 2) above using column 3. (CHECKLIST A)

9) For the sixth two-minute interval repeat 2) above using column 3. (CHECKLIST B)

After 24 minutes of observation complete DOCUMENTS AND MATERIALS CHECKLIST and TEACHER INTERVIEW and STUDENT INTERVIEW forms by consulting with teachers and/or students if necessary.

| Step | Activity | Time |
|---|---|---|
| 1 | Teacher observation # 1 | 4 min. |
| 2 | Student observation # 1A | 2 min. |
| 3 | Student observation # 1B | 2 min. |
| 4 | Teacher observation # 2 | 4 min. |
| 5 | Student observation # 2A | 2 min. |
| 6 | Student observation # 2B | 2 min. |
| 7 | Teacher observation # 3 | 4 min. |
| 8 | Student observation # 3A | 2 min. |
| 9 | Student observation # 3B | 2 min. |
| | Student/Teacher interviews | 10 min. |
| | Total | 34 min. |

Starting Time

# 1 _____

# 2 _____

# 3 _____

## TEACHER BEHAVIOR CHECKLIST

| | | |
|---|---|---|
| 1. moves about the classroom | 1 | |
| | 2 | |
| | 3 | |
| 2. speaks in a conversational or low tone, (but not to total class) | 1 | |
| | 2 | |
| | 3 | |
| 3. smiles and/or laughs | 1 | |
| | 2 | |
| | 3 | |
| 4. talks with a student | 1 | |
| | 2 | |
| | 3 | |
| 5. listens to student or students | 1 | |
| | 2 | |
| | 3 | |
| 6. joins group of students but does not speak immediately | 1 | |
| | 2 | |
| | 3 | |
| 7. sits down or stands with a student or students | 1 | |
| | 2 | |
| | 3 | |
| 8. assists students in some activity by doing the same thing as a student does | 1 | |
| | 2 | |
| | 3 | |
| 9. shows student new or different material or equipment than that which he is currently using | 1 | |
| | 2 | |
| | 3 | |
| 10. expresses approval of a student's activity in non-verbal way | 1 | |
| | 2 | |
| | 3 | |
| 11. is accessible to any/all students | 1 | |
| | 2 | |
| | 3 | |
| | 1 | |
| | 2 | |
| | 3 | |

Starting Time

# 1 _____

# 2 _____

## STUDENT BEHAVIOR CHECKLIST A

| | 1 | 2 | 3 |
|---|---|---|---|
| 1. entering classroom | | | |
| 2. leaving classroom | | | |
| 3. walking around classroom | | | |
| 4. approaching (walking up to) teacher | | | |
| 5. conversing alone with teacher | | | |
| 6. working alone, but not on total class activity | | | |
| 7. working in a small group (2-8 people) | | | |
| 8. smiling and/or laughing | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

STUDENT BEHAVIOR CHECKLIST B

Starting Time
# 1 _____
# 2 _____

| | 1 | 2 | 3 |
|---|---|---|---|
| 1. changing activity | | | |
| 2. moving furniture | | | |
| 3. altering physical appearance of part of room (other than moving furniture) | | | |
| 4. using materials in addition to (or other than) textbook, work book, or "paper & pencil" materials | | | |
| 5. continuing with present activity when a non-class person enters or leaves room | | | |
| 6. involved in activities with teacher out of room | | | |
| 7. number of different activities | | | |
| 8. number of different student groups | | | |
| | | | |
| | | | |
| | | | |
| | | | |

TEACHER INTERVIEW CHECKLIST

(If behavior can be observable, mark accordingly)

| Did the teacher- | YES | NO | DK or NA | COMMENTS |
|---|---|---|---|---|
| 1. Ask or encourage one student to speak to, work with, or help another? | | | | |
| 2. Leave classroom without making an announcement? | | | | |
| 3. Respond or act at the request or direction of a student? | | | | |
| 4. Have documented knowledge of interests, experiences, and problems of each student? | | | | |
| 5. Know what each student was trying to accomplish? | | | | |
| 6. Suggest additional or substitute activities to any student(s)? | | | | |
| 7. Not address the class as a whole, other than giving an initial or concluding directive? | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

STUDENT INTERVIEW CHECKLIST

(If behavior is observable, mark accordingly)

| Did or could the student- | YES | NO | DK / NA | COMMENT |
|---|---|---|---|---|
| 1. select his own activity (not teacher-directed)? | | | | |
| 2. select his own materials/ equipment? | | | | |
| 3. work in a self-selected area (unassigned by the teacher)? | | | | |
| 4. use material or equipment not provided by the school? | | | | |
| 5. ask another student for help? | | | | |
| 6. ask the teacher for help? | | | | |
| 7. show another student what he was doing (at the request of either one)? | | | | |
| 8. show the teacher what he was doing (at the initiative of the student)? | | | | |
| 9. continue any classroom originated activity out of the school setting? | | | | |
| 10. feel that he was succeeding in his undertaking? | | | | |
| 11. feel comfortable (satisfied) with this type of classroom? | | | | |
| 12. talk in conversational or low tones? | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

DOCUMENTS AND MATERIALS CHECKLIST

Put an X beside each of the following which are available in the classroom (all except number 1 must be part of number 1).

_____1. written documents of students' activities

_____2. number 1 is available for each student

_____3. number 1 is in location where students can refer to it

_____4. teacher writes comments about students which are included in number 1

_____5. student writes comments about self which are includes in number 1

_____6. student writes his own goals in number 1

_____7. teacher provides space for student's personal materials

_____8. students can reach all materials in the classroom

PROJECT COD
ESEA Title III

# SELECTED CLASSROOM PROJECT

## Anecdotal Report

1. What activities were underway during the visit?

2. What was the general level of pupil activity in the room?

3. What was the general role of the teacher?

4. What specific pupil and/or teacher activities stand out (either positive-P, or negative-N)?

5. Other:

# Appendix J

1. Final SCP Teacher Questionnaire

2. Summary of Data, Final SCP Teacher Questionnaire

Project COD
52 Ash Street
New Bedford, Mass. 02740

## Final S.C.P. Questionnaire

1. Name_____ 2. Age____ (your secret will die with us!)

3. Years of Teaching_____

4. Other grade levels taught previously_____

5. Major (for your Bachelor's degree)_____

6. At this point, what is your overall level of satisfaction with your classroom in the project?

| very low | low | ok | high | very high |
|---|---|---|---|---|

7. At this point, what is your level of satisfaction with your performance as a teacher in this project?

| very low | low | ok | high | very high |
|---|---|---|---|---|

8. At this point, what is your level of satisfaction with the performance of students?

| very low | low | ok | high | very high |
|---|---|---|---|---|

9. Place the students in your class(es) on the following scale as to the % falling into each space.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| a total loss! | little response | a glimmer of hope | real possi-bilities | involved with good results | highly self-directed & motivated | | hard to believe! |

10. What are the five most desirable characteristics of your classroom at this time? (These can include physical arrangements, student behavior, teacher behavior, or anything else which would be descriptive of your program.)

_____

_____

_____

_____

_____

11. What are the five least desirable characteristics of your classroom at this time?

_____

_____

_____

_____

_____

12. At this point, I feel the COD staff (circle one)
    a) has been very helpful to me
    b) has been helpful to me
    c) hasn't been of much help
    d) hasn't been of any help
    e) hasn't really been needed in my situation

13. Ideally next fall, would you like to have the type of classroom you have now?

    Yes ☐ No ☐

    If no, explain: _____

_____

_____

_____.

If you have other comments, you are welcome to put these on the back.

Thanks.

Project COD
52 Ash Street
New Bedford, Mass. 02740

SELECTED CLASSROOM PROJECT

Summary of Final S.C.P. Teacher Questionnaire
(20 responses)

Q. 6. At this point, what is your overall level of satisfaction with your classroom in the project?

| Responses: N= | 2 | 5 | 9 | 4 |
|---|---|---|---|---|
| very low | low | ok | high | very high |

Q. 7. At this point, what is your level of satisfaction with your performance as a teacher in this project?

| Responses: N= | | 9 | 7 | 4 |
|---|---|---|---|---|
| very low | low | ok | high | very high |

Q. 8. At this point, what is your level of satisfaction with the performance of students?

| Responses: N= | 1 | 6 | 11 | 2 |
|---|---|---|---|---|
| very low | low | ok | high | very high |

Q. 9. Place the students in your class(es) on the following scale as to the % falling into each space.

Responses: N= average percent.

| 2.2 | 7.6 | 8.6 | 23.1 | 36.2 | 18.6 | 3.7 |
|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a total loss! | little response | a glimmer of hope | real possibilities | involved with good results | highly self-directed & motivated | hard to believe! |

Q. 10. What are the five most desirable characteristics of your classroom at this time? (These can include physical arrangements, student behavior, teacher behavior, or anything else which would be descriptive of your program.)

Responses: (Numerals in parentheses indicate no. of responses.)

Student-Teacher Relationship
1. Very positive student-teacher relationship. (12)
2. My knowledge of the student is much more personal and wider. (3)
3. Program allows for much more individual counselling.
4. I can reach quite a few kids on a 1-1 basis.

Student-Student Relaitonships
1. More normal operation relative to human behavior. (2)
2. Student sharing of ideas on subject and life.
3. Kids seem to work together more cooperatively.
4. Kids seem to care more about their friends and what they're doing.
5. Real interaction seems to be happening.

Achievement Levels
1. Greatly increased student enthusiasm. (5)
2. Changing attitude toward learning.
3. Some students are discovering knowledge that I never would have covered this year. (2)
4. High level of creativity and originality. (2)
5. Children seem to be enjoying, learning more than previously.
6. Students expressing themselves far more articulately.
7. Achievement levels of my slower students. (4)

Student Self-Reliance
1. Students are catching on to the responsibility aspect. (2)
2. Majority of students are self directed. (2)
3. They are highly organized when they want to be.
4. Extension of school activities beyond school hours.
5. Some kids are intensely committed and interested.
6. Kids are far more eager to evolve own projects.

Learning Environment
1. A very relaxed cheerful atmosphere. (7)
2. Students are freer. (8)
3. There are no outside distrubances anymore. (Strangers, noises, etc. Everything is taken in stride.)
4. There is a great student satisfaction after completing a goal.
5. The room has been personalized by the students.

6. Range of studies open to students.
7. Different levels of learning.
8. Teacher as a resource and instructor.
9. Classroom resources being used more completely. (4)
10. Students say they are enjoying their work and their teachers more than before.
11. Positive response toward learning. A real "liking" for the subject matter.
12. Exciting atmosphere in the class.
13. Informality.
14. Physical arrangement.
15. The time is no longer important.
16. Small number of students.
17. Opportunity given to students to develop their strong points and interests.
18. No one lacks confidence in himself. All have found something good about themselves.
19. Less teacher imposed structure. (2)
20. The easy ways that classrooms can be changed.

Teacher
1. I can relax and move from student to student as they need and want me.
2. My kids and I can joke together.
3. I'm more motivated and excited about my work, and find it easier to generate more spontaneous ideas.
4. The easy flow of ideas between teachers in the program.
5. I am much more sure that what I'm trying to do is right.
6. Better criteria for evaluation.

Q. 11. What are the five least desirable characteristics of your classroom at this time?

Responses: (Numerals in parentheses indicate no. of responses.)

Parents
1. Not enough parental support. (2)
2. Parental pressure for standard "skill development".

Teachers
1. Teacher's tolerance at times.
2. Lack of planning time.
3. Mental fatique on my part from continually changing and readjusting of program. (2)
4. Not enough time to see everyone and everything I'd like to. (6)
5. Difficulty in maintaining a good learning atmosphere for all students. (2)
6. Following and maintaining pupil progress.

7. My uncertainties about how to structure.
8. My unfamiliarity with the individual child.
9. Uneasy about my relations with teachers not in the program.
10. Sometimes a feeling of being too free.
11. Mess! I still can't get kids to put things in the proper place. (6)
12. I have too many children. (42 in class.)

Kids

1. Some students' dependence on me.
2. Some of the students are running out of ideas. (2)
3. A few students having difficulty handling new freedom. (4)
4. Some students still have not gained enough confidence to work along or without friends.
5. People rely on subject area rather than projects.
6. Some still do not do anything.
7. Quality of goal setting.
8. Their pessimistic attitude toward classrooms in traditional manner.
9. Not enough use of outside resources. (2)
10. Teacher oriented, textbook oriented.
11. Silence.
12. Lack of cocperation.
13. Freedom brings out negative behaviors in many students. (3)
14. Abuse of materials.
15. Students have a tough time getting back to a structured class. (2)

Physical

1. Not enough materials, supplies, equipment, space, resources, etc. (14)
2. High level of movement and noise.
3. Too much material available. Inhibits the development of truly individual projects.
4. Changing of classes.

Miscellaneous

1. Substitute teacher problem.
2. Because they've all tasted success, sometimes they want to tell important people how to do a better job.
3. Necessity to give grades.
4. Questionable evaluation procedure.
5. Clean up is time consuming.

Q. 12. At this point, I feel the COD staff (circle one)

Responses: (Numerals in parentheses indicate no. of responses.)

a) has been very helpful to me (10)
b) has been helpful to me (7)
c) hasn't been of much help (3)
d) hasn't been of any help (0)
e) hasn't really been needed in my situation (0)

Q. 13. Ideally next fall, would you like to have the type of classroom you have now?

Responses: ☐ Yes (16) ☐ No (3) 1 no response.

If no, explain:

Explanations:

I would like to have a more inviting physical set-up, more games in the classroom (word games, geographical games, map games) in other words, more physical activities which involve learning.

Somewhat along the same lines, but with a greater variety of learning methods and more motivation.

## Appendix K

1. SCP Principal's Questionnaire

2. Summary of Data, SCP Principal's Questionnaire

Project COD
52 Ash Street
New Bedford, Mass. 02740

## S.C.P. Principals' Questionnaire

1. What is your overall level of satisfaction with the Selected Classroom Project?

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| It had no value to staff or students | It was less than satisfactory | it was ok | it was valuable | it greatly exceeded my expectations |

Comments: _____

_____

_____

_____

_____

2. Please rate the level of your satisfaction with the teachers who participated (NOTE: Do not identify the teachers by name. Mark one scale for each teacher who officially participated.)

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Teacher 1 | | | | | |
| Teacher 2 | | | | | |
| Teacher 3 | | | | | |
| Teacher 4 | | | | | |
| | Did very poorly | Did less well than previously | Functioned OK - about the same | Improved over past performance | did extremely well |

Comments: _____

_____

_____

_____

_____

3. Please rate your general level of satisfaction with the students who were in the S.C.P. classes.

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Students reacted badly, did not learn well, misbehaved | most students reacted poorly | students did not behave differently | most students reacted pretty well | Most students reacted well, seemed to enjoy this approach, seemed to learn with good motivation, etc. |

Comments: _____

_____

_____

_____

_____

4. I feel the COD staff (circle one)
   a) has been very helpful to the teachers
   b) has been helpful to the teachers
   c) has not been of much help to the teachers
   d) has not been of any help to the teachers
   e) was not really needed by the teachers

Comments: _____

_____

_____

_____

5. What were the most significant positive results of participating in this project? (List in order of importance, from most to less important.)

_____

_____

_____

_____

_____

6. What were the most significant negative results? (List in order of importance.)

_____

_____

_____

_____

_____

7. Would you encourage these teachers or others to operate classrooms in this manner next year?

Yes ☐ No ☐

If no, please explain why. _____

8. Do you feel that <u>you</u> had a meaningful role in the S.C.P.?

Yes ☐ No ☐

Comment: _____

_____

_____

_____

9. How could Project COD have been more helpful to <u>you</u> in relation to the Selected Classroom Project?

_____

_____

_____

_____

Project COD
52 Ash Street
New Bedford, Mass. 02740

SELECTED CLASSROOM PROJECT
Principals Questionnaire
Summary of Questionnaire

Q. 1. What is your overall level of satisfaction with the Selected Classroom Project?

Responses: N=

| | | 1 | 3 | 4 |
|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 |
| It had no value to staff or students | It was less than satisfactory | It was ok | it was valuable | it greatly exceeded my expectations |

Comments:

1. I think the project forced us to take a close look at our own philosophy of "life in schools" and urged us to put our beliefs into practice quickly. Otherwise it might have taken a few years to get started.
2. This program provided a wonderful opportunity for the instructors to try out an unstructured approach to learning under expert guidance.
3. I saw each classroom a little differently than the next but I was very pleased with all of them.
4. The S.C.P. teachers learned to work together in a most cooperative manner. The pupils benefited from this.
5. It was innovative and deviated from the traditional classroom set up.

Q. 2. Please rate the level of your satisfaction with the teachers who participated. (NOTE: Do not identify the teachers by name. Mark one scale for each teacher who officially participated.)

Responses: N= number of teachers ranked at a given place on the scale.

| | 1 | 1 | 8 | 10 | |
|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | |
| Did very poorly | Did less well than previously | Functioned OK - about the same | Improved over past performance | did extremely well | |

Comments:

1. I have seen the teachers grow as persons. I have seen them grow in their own interests; they certainly have had to become more responsible themselves. For our teachers, I know the project was a tremendous experience that right now we are too close to fully realize its impact on our own personal lives - attitudes, outlook, etc.
2. The teachers did not go "all out" with the new set up, but they did incorporate what they considered the most valuable ideas of the program. They grew in their understanding of children and discovered methods of helping pupils to fulfill their individual needs.
3. I'm not so sure other members of my staff could handle this type of program. As a matter of fact, I know some do not think much of it. Some are leaving.
4. It seems to me that the control level in one of the sections was not as good as it was in the other section.
5. All of the S.C.P. teachers worked long and hard to insure the success of the project. They deserve all the credit for what has been accomplished.
6. One teacher operated about the same manner. Another became more innovative.

Q. 3. Please rate your general level of satisfaction with the students who were in the S.C.P. classes.

Responses: N= number of principals who ranked the S.C.P. students at a given place on the scale.

| | | | | |
|---|---|---|---|---|
| | | 2 | 2 | 4 |
| 0 | 1 | 2 | 3 | 4 |
| Students reacted badly, did not learn well, misbehaved | most students reacted poorly | students did not behave differently | most students reacted pretty well | Most stuents reacted well, seemed to enjoy this approach, seemed to learn with good motivation, etc |

Comments:

1. Some do not do much work - seem to need more structure - but then these - most of these students have not done much for the past four years of school.

2. The change in attitude toward school by those who previously disliked school impressed me greatly. In addition, nearly all pupils worked harder and accomplished more than would have been the case in the regular classroom set-up.
3. The brighter pupils were challenged to think for themselves and the slower workers found they could get satisfaction from school work.
4. Reaction to the increased amount of classroom freedom was generally good. If this procedure had been used previously by the teachers, it would have improved general discipline of students.
5. Right now we are having a problem trying to find out how many students are dissatisfied and what their reason is (parental influence or if their own needs are not being met through the program).

Q. 4. I feel the COD staff (circle one):

Responses: Numerals in parentheses indicate no. of responses.

a) has been very helpful to the teachers (6)
b) has been helpful to the teachers (2)
c) has not been of much help to the teachers
d) has not been of any help to the teachers
e) was not really needed by the teachers

Q. 5. What were the most significant positive results of participating in this project? (List in order of importance, from most to less important.)

Responses: (Numbers in parentheses indicate weighting. Those responses which were listed as "most" important are given a weight of five. "Least" important are weighted 1.)

Students:

1. The development of a positive attitude toward school by pupils. (5)
2. Increased pupil interest. (5)
3. The students have been able to establish a one to one relationship with each teacher. (5)
4. Students felt much more happy. (5)
5. Learn by doing process. (4)
6. The quality and quantity of work produced by pupils. (4)
7. Allowed me the opportunity to see pupils look at other pupils in a new humanistic manner. (4)
8. Ability of pupils to evaluate themselves. (4)
9. Student participation in classroom work greatly increased. (3)

10. An establishment of awareness in the students of other ways to learn; the variety can be a part of school life. (3)
11. Better understanding through pupil-teacher conferences. (3)

Teachers:

1. One classroom showed marked improvement in subject matter presentation and results. (5)
2. Teachers were more relaxed teaching. (4)
3. A tremendous lessening of negative verbalizatoins from teachers to students about insignificant rules, etc. (4)
4. Gave support to teachers in the form of aids and released time. (4)
5. The pupils and teachers of three rooms working together. (3)
6. The esprit de corps developed among our three teachers. (2)
7. Less reliance on teacher as a fact base. (2)

School in general:

1. Reinforced an idea already being tried out. (5)
2. Opened door to a new way of teaching. (5)
3. Innovative classroom procedure. (5)
4. A positive vehicle for changing teacher attitude. (3)
5. Some of the methods I hope will spread to other rooms in the school and other schools. (3)
6. People to people contact in school; not teacher to student and vice versa. (2)
7. The interest and enthusiasm of most of our other teachers. (1)

Q. 6. What were the most significant negative results? (List in order of importance.)

Responses: (Numbers in parentheses indicate weighting. Those responses which were listed as "most important" are given a weight of 5. "Least important" are weighted 1.)

Reactions of others:

1. Tremendous frustrations building up now from negative reactions that we hear second-hand (from parents). (5)
2. Parent reactions in some cases were quite negative. (5)
3. Rumors that grew up in the community. (5)
4. My inability to change the attitude of other faculty members who are anti this method of teaching. (4)

Students:

1. The noise level was a problem until the pupils learned to show consideration for the other groups and developed self control. (5)
2. A few pupils developed a disrespectful attitude in personal relations with their peers and their instructors. (5)
3. Some students unable to enjoy increased classroom freedom. (5)
4. Some students will always seek teacher direction. (4)
5. One or two pupils were unable to respond to this system. (4)

Teacher-Curriculum:

1. Important subject areas could be overlooked. (3)
2. Subject direction and content less oriented. (2)

Q. 7. Would you encourage these teachers or others to operate classrooms in this manner next year?

Responses:

Yes ☐ (8) No ☐ (0)

Q. 8. Do you feel that you had a meaningful role in the S.C.P.?

Responses: 1 no answer.

Yes ☐ (6) No ☐ (1)

The one principal who answered this question "no" commented: "Very little contact and exchange of information regarding teacher performance."

Q. 9. How could Project COD have been more helpful to you in relation to the Selected CLassroom Project?

Responses: 1 no answer.

1. I think we were offered all help possible.
2. I can't think of anything.
3. I think Project COD has done a marvelous job in every way possible.
4. I can't think of anything we needed that we didn't receive help on.
5. We did not hesitate to seek help whenever we felt a need. Therefore, I know of no way Project COD could have been more helpful.
6. We probably should have brought parents in at the beginning. Also provided one classroom with a more traditional

program for those parents who seem to be incapable of functioning or understanding the program. Some - a few - are really up tight about it.

7. Right now I feel that more communicating with the parents might have helped. I wish I had had some help in periodic communication with parents - perhaps newsletters or something.

## Appendix L

Seventh Grade Survey

by

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NOTE: *The following data was collected independently of Project COD, and is reproduced with permission.*

DARTMOUTH MIDDLE SCHOOL

SELECTED CLASSROOM PROJECT SURVEY

Seventh Grade

(Conducted by Albert J. Figueiredo, Guidance Counselor for Grade 7)

It was requested by the two participating project teachers in the seventh grade that I talk to students in the project to discuss their thoughts on their individual participation. From this request I decided to formulate a basic set of key questions to ask each student interviewed. The twelve questions that I established to be the base that the students might draw from to discuss their reactions were arrived at independent of the project teachers as was the correlation of the data.

This survey was conducted at various intervals during the period of February 2 to March 25, 1971. With the exception of five students, all interviewed were taken at random and in small groups of four. Each group was involved in a discussion that covered a time period of at least 28 minutes up to a maximum of 62 minutes. Out of the 81 pupils participating in the project 73 were interviewed. The remaining 8 were not seen because of absences, schedule commitments, etc.

Although some pupils were passive in the discussions, I found that the greater percentage of youngsters were verbal and I felt quite open. I attempted at all times not to indicate my own opinions, attitudes, or values while framing the questions or receiving reactions. During this period of interviewing I found my own atiitudes towards this program slightly skewed and a good deal enlightened.

Questions and Responses

1. Have you enjoyed your participation in the project to date?

   Yes - 92% (67)  No - 5% (4)  Half and Half - 3% (2)

2. For the time that you have been in the project, do you find that it has turned out pretty much the way you originally thought it would?

   a. Approximately one-third answered "yes"

   b. Those who answered "no" generally found that it was less restrictive in choice of topics than they had originally thought. The following comments were also voiced: less similar to written projects of prior years; teachers were not allowing students complete freedom of choice; more work involved in daily logs, etc.

3. Do you personally feel that you are getting as much, more, or less out of school than you were in November or December?

   More - 58% (42)  Less - 23% (17)  Same - 19% (14)

   Comments:

   1. "get more out of something you enjoy - have interest in."
   2. "remember things longer this way."
   3. "learning from book, you learn it for a test - then forget it."
   4. "learning up-to-date things of interest."

4. Knowing what you know now, if given the choice, would you have agreed to participate in this program?

   Yes - 86% (63)  No - 11% (8)  Qualified conditions - 3% (2)

5. How will you feel if you are graded in a manner other than A, B, C?

   Written evaluation - 77% (56)  A, B, C grades - 23% (17)

   Comments:

   1. "without A, B, C, no competition"
   2. "it tells you what you did wrong rather than just a mark"

3. "more explanation to it"

4. "OK for project - wouldn't want it in regular subjects"

5. "fairer - better picture"

6. "could not be any other way as it's teacher opinion - we do not go to school to flatter teachers to get a good mark"

6. You still have reading, math, and science in the original setting and manner. How do those subjects compare to your selected project in a) interest? b) accomplishments?

a) interest:

selected projects - 77% (56)
traditional subjects - 18% (13) (of these 10 specified math, in particular)

equal interest - 4% (3)
no comment - 1% (1)

b) accomplishments:

selected projects - 30% (22)
traditional subjects - 56% (41) (of these 19 specified math, in particular)

equal accomplishment - 11% (8)
no comment - 3% (2)

7. Have you noticed a different relationship between you and others in your class as a result of the activities? Have you noticed a different relationship between you and your project teachers?

a) classmates:

Yes - 92% (67) No - 8% (6)

b) teachers:

Yes - 95% (69) No - 5% (4)

Comments:

<u>Teachers in project</u>:

"crabby" "easier" "grouchier"

"some ways easier, some ways harder"

"stricter" "We now know what they expect"

"Know them as persons" "open" "particular"

"Get to talk to teachers - they get to talk to us"

"More time for individual student"

"Don't act like teachers" "group guidance classes are better"

Classmates in project:

"Kids lot more open" "Try to get along with them, now. Before, you just knew a kid to say 'hi' to"

"Sometimes a kid received a bad mark--parents wouldn't let you play with them (dumb kids). Now we see kids might be good in different things"

8. Has participation in this project given you any different thoughts on individual responsibility, organizations, etc.?

Yes 81% (59) No - 16% (12) Undecided - 3% (2)

9. How do you feel that your educational experiences in this program during your seventh grade year will compare with others going into the eighth grade next year who have not participated in this program?

Better - 29% (21) Not as well - 5% (4) No difference 19% (14)
Qualified response 47% (34)

Consensus of qualified responses:

"Better off in research skills - won't know as much in history"

"Worse off in English - better in reports and organization"

"Missing some of the basics - much better off in research, organization, getting facts"

"They will be in social studies and language - we will be in reports, etc."

## Observations

I found that some youngsters had a good deal of insight and gave real in-depth considerations to points of discussion. It was interesting to note that although most students enjoyed participat-

ing in a self-selected project, many youngsters found the teachers more demanding and the requirements of arriving at self-established goals and time schedules even more demanding.

The most poignant observations that come to mind from the discussions are:

> ".....if it wasn't for the project, I wouldn't want to get up in the morning."
>
> "My parents say that I'm not as grouchy when I get home at night."
>
> "Sometimes a kid received a bad mark -- parents wouldn't let you play with them (dumb kids). Now we see kids might be good in different things."
>
> "....get to talk to teachers -- they get to talk to us."

The students without exception acknowledged that they felt they could not function in the area of math in a program structured in this manner. I feel that from the strengths of the math teacher most of the youngsters enjoyed the approach to this year's experience and most have felt that they have grown a good deal in this area.

Reflectively, it appears to me that in this particular situation the structured traditional math atmosphere has complimented the more open selected project approach. In most instances, the students have adapted to going from the free exploratory type classroom to the structured traditional classroom, making the necessary adjustments seemingly without serious consequences. To me, this adaptive situation alone is a learning experience.